Bulletin de veille

« Focus sur 12 pathologies graves »

Mars 2010

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Le Service Documentation de l'EHESP édite **mensuellement** un bulletin de veille. Celui-ci signale les **articles récents**, parus dans des revues scientifiques de renommée internationale, autour de **12 pathologies graves,** ainsi que sur la **pandémie grippale**. Ce bulletin signale également des **rapports officiels et institutionnels** disponibles en texte intégral.

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Bulletin de veille – Mars 2010
« Focus sur 12 pathologies graves »

Ce bulletin de veille est une **publication mensuelle** qui recueille les publications scientifiques autour des **pathologies** suivantes :

- Bronchite chronique obstructive
- Cancer du poumon
- Dengue
- Dépression
- Diabète
- Grippe A
- Maladie d'Alzheimer
- Maladies cardio-vasculaires
- Maladies liées à l'alcool
- Paludisme
- Pathologies liées à l'obésité
- SIDA
- Tuberculose

La recherche documentaire est effectuée dans la **base de données Medline** et porte sur les **12 titres de revues** suivants :

- American journal of epidemiology
- American journal of public health
- BMC public health
- BMJ (Clinical research ed.) - British medical journal
- International journal of epidemiology
- JAMA : the journal of the American Medical Association
- Lancet
- Nature
- Risk analysis : an official publication of the Society for Risk Analysis
- Science
- Social science & medicine
- The New England journal of medicine

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Articles scientifiques issus de l'interrogation de la base Medline (interrogée le 03/03/2010)

Rapports et dossiers en ligne

Articles scientifiques

Bronchite chronique obstructive

sommaire

(1) JUERGENS UR. **[End therapeutic nihilism towards COPD]**. MMW Fortschr Med. 2007 Mar. 15, vol. 149, n° 11, pp.34-5, 37
http://www.ncbi.nlm.nih.gov/pubmed/20104699

Prevention of COPD requires appropriate patient education, especially of adolescents, as well as the establishment of an effective national health policy. The new GOLD guidelines represent the current standard of knowledge on the management of chronic, progressive, obstructive pulmonary diseases. It points out that COPD is avoidable and treatable,and hence, there is no reason for therapeutic nihilism. Chronic bronchitis preceding a progressive respiratory obstruction cannot be improved with the presently available respiratory therapeutics. For this reason, therapeutic measures concentrate on the avoidance of exacerbations, which are primarily responsible for the severity of the course of COPD

(2) LYNCH DA, NEWELL JD. **Quantitative imaging of COPD**. J Thorac Imaging. 2009 Aug., vol. 24, n°3,pp.189-194
http://dx.doi.org/10.1097/RTI.0b013e3181b31cf0

Computed tomography has facilitated recognition that chronic obstructive pulmonary disease is not a single disease but encompasses several overlapping entities, including emphysema, bronchitis, and small airways disease. Quantitative computed tomography can effectively characterize and quantify the extent of emphysema, airway wall thickening, and air trapping related to small airways disease

(3) MIRAVITLLES M, ANZUETO A, EWIG S, LEGNANI D, *et al.* **Characterisation of exacerbations of chronic bronchitis and COPD in Europe: the GIANT study**. Ther Adv Respir Dis. 2009 Dec., vol.3,n°6,pp.267-277
http://dx.doi.org/10.1177/1753465809352791

OBJECTIVE: The GIANT study collected information on patients with acute exacerbations of chronic bronchitis (AECB) and chronic obstructive pulmonary disease (COPD) and the effect of treatment with moxifloxacin. METHODS: AECB history, concomitant diseases, moxifloxacin treatment, concomitant medication, clinical symptoms and adverse events were recorded. A questionnaire at the end of treatment recorded the impact on patients' daily lives. RESULTS: Among 9225 patients from eight European countries, marked variation was seen in characteristics including age, smoking history and type of exacerbation. Spirometry use was more common among chest physicians (66.7%) than GPs (15.5%). Patients with Anthonisen type 1 and 2 exacerbations had more frequent exacerbations and these patients experienced a greater impact on daily activities compared with patients with type 3 episodes. Patient symptoms improved with moxifloxacin treatment after a mean (SD) of 3.4 (1.8) days, allowing return to normal daily activities after 5.4 (4.4) days and with full recovery taking 6.5 (3.1) days. CONCLUSIONS: Characteristics of patients with AECB and acute exacerbations of COPD differ among European countries. Spirometry is under-used, particularly in primary care and antibiotic treatment does not always follow current guidelines. Results confirm the efficacy of moxifloxacin in the treatment of AECB in real-life conditions

(4) PANEV NI, KOROTENKO OI, FILIMONOV SN, BURDEIN AV, *et al.* **[Structural and functional changes in myocardium at rest and under exertional test in dust bronchitis patients having coronary heart disease and arterial hypertension]**. Med Tr Prom Ekol. 2009, n° 11, pp.43-48
http://www.ncbi.nlm.nih.gov/pubmed/20095415

The estimation of structural-functional state of right and left heart before and after loading test at patients suffered from chronic mechanic bronchitis in combination with ischemic heart disease and arterial hypertension is carried out using an echocardiography method. It is revealed that the combination of chronic mechanic bronchitis, ischemic heart disease and arterial hypertension results in remodelling both ventricles and hastens chronic pulmonary heart development

(5) SCHERMER T, CHAVANNES N, DEKHUIJZEN R, WOUTERS E, *et al.* **Fluticasone and N-acetylcysteine in primary care patients with COPD or chronic bronchitis**. Respir Med. 2009 Apr.,vol.103,n°4,pp.542-551
http://dx.doi.org/10.1016/j.rmed.2008.11.003

BACKGROUND: Increased oxidative stress and bronchial inflammation are important mechanisms in the pathophysiology of COPD. AIM: To investigate whether treatment with the inhaled corticosteroid fluticasone propionate (FP) or the anti-oxidative agent N-acetylcysteine (NAC) are effective in primary care patients. METHODS: The study was a 3-year placebo-controlled randomised controlled trial preceded by a 3-month washout and 2-week prednisolone pre-treatment. Patients were (ex-)smokers with chronic bronchitis or COPD. Interventions were inhaled FP 500microg b.i.d., oral NAC 600mg o.d., or placebo. Exacerbation rate and quality of life measured with the Chronic Respiratory Questionnaire (CRQ) were the primary outcomes, FEV(1) decline and respiratory symptoms secondary outcomes. RESULTS: 286 patients recruited from 44 general practices were randomised. Exacerbation rate was 1.35 times higher for NAC (p=0.054) and 1.30 times higher for FP (p=0.095) compared with placebo. CRQ total scores did not differ between NAC (p=0.306) or FP (p=0.581) treatment compared to placebo. Annual postbronchodilator FEV(1) decline was 64mL [SD 5.4] for NAC [p=0.569 versus placebo], 59mL [SD 5.7] for FP [p=0.935], and 60mL [SD 5.4] for placebo. CONCLUSION: No beneficial treatment effects for either high-dosed inhaled fluticasone propionate or oral N-acetylcysteine were observed in our study population of patients with COPD or chronic bronchitis

Cancer du poumon

sommaire

(1) BELANI CP, LIAO J. **Maintenance therapy for non-small-cell lung cancer**. Lancet. 2010 Jan. 23, vol. 375, n° 9711, pp.281-282
http://dx.doi.org/10.1016/S0140-6736(10)60131-6 **(Accès réservé EHESP)**

(2) CLARKE GM, MORRIS AP. **A comparison of sample size and power in case-only association studies of gene-environment interaction**. Am J Epidemiol. 2010 Feb. 15, vol. 171, n°4,pp.498-505
http://dx.doi.org/10.1093/aje/kwp398 **(Accès reserve EHESP)**

Assuming continuous, normally distributed environmental and categorical genotype variables, the authors compare 6 case-only designs for tests of association in gene-environment interaction. Novel tests modeling the environmental variable as either the response or the predictor and allowing a genetic variable with multiallelic variants are included. The authors show that tests imposing the same genotypic pattern of inheritance perform similarly regardless of whether genotype is the response variable or the predictor variable. The novel tests using the genetic variable as the response variable are advantageous because they are robust to non-normally distributed environmental exposures. Dominance deviance-deviation from additivity in the main or interaction effects-is key to test performance: When it is zero or modest, tests searching for a trend with increasing risk alleles are optimal; when it is large, tests for genotypic effects are optimal. However, the authors show that dominance deviance is attenuated when it is observed at a proxy locus, which is common in genome-wide association studies, so large dominance deviance is likely to be rare. The authors conclude that the trend test is the appropriate tool for large-scale association scans where the true gene-environment interaction model is unknown.

The common practice of assuming a dominant pattern of inheritance can cause serious losses of power in the presence of any recessive, or modest dominant, effects

(3) MOSTERTZ W, STEVENSON M, ACHARYA C, CHAN I, *et al.* **Age- and sex-specific genomic profiles in non-small cell lung cancer**. JAMA. 2010 Feb. 10, vol. 303, n° 6, pp.535-543
http://dx.doi.org/10.1001/jama.2010.80 **(Accès reserve EHESP)**

CONTEXT: Gene expression profiling may be useful in examining differences underlying age- and sex-specific outcomes in non-small cell lung cancer (NSCLC). OBJECTIVE: To describe clinically relevant differences in the underlying biology of NSCLC based on patient age and sex. DESIGN, SETTING, AND PATIENTS: Retrospective analysis of 787 patients with predominantly early stage NSCLC performed at Duke University, Durham, North Carolina, from July 2008 to June 2009. Lung tumor samples with corresponding microarray and clinical data were used. All patients were divided into subgroups based on age (< 70 vs > or = 70 years old) or sex. Gene expression signatures representing oncogenic pathway activation and tumor biology/microenvironment status were applied to these samples to obtain patterns of activation/deregulation. MAIN OUTCOME MEASURES: Patterns of oncogenic and molecular signaling pathway activation that are reproducible and correlate with 5-year recurrence-free patient survival. RESULTS: Low- and high-risk patient clusters/cohorts were identified with the longest and shortest 5-year recurrence-free survival, respectively, within the age and sex NSCLC subgroups. These cohorts of NSCLC demonstrate similar patterns of pathway activation. In patients younger than 70 years, high-risk patients, with the shortest recurrence-free survival, demonstrated increased activation of the Src (25% vs 6%; P<.001) and tumor necrosis factor (76% vs 42%; P<.001) pathways compared with low-risk patients. High-risk patients aged 70 years or older demonstrated increased activation of the wound healing (40% vs 24%; P = .02) and invasiveness (64% vs 20%; P<.001) pathways compared with low-risk patients. In women, high-risk patients demonstrated increased activation of the invasiveness (99% vs 2%; P<.001) and STAT3 (72% vs 35%; P<.001) pathways while high-risk men demonstrated increased activation of the STAT3 (87% vs 18%; P<.001), tumor necrosis factor (90% vs 46%; P<.001), EGFR (13% vs 2%; P = .003), and wound healing (50% vs 22%; P<.001) pathways. Multivariate analyses confirmed the independent clinical relevance of the pathway-based subphenotypes in women (hazard ratio [HR], 2.02; 95% confidence interval [CI], 1.34-3.03; P<.001) and patients younger than 70 years (HR, 1.83; 95% CI, 1.24-2.71; P = .003). All observations were reproducible in split sample analyses. CONCLUSIONS: Among a cohort of patients with NSCLC, subgroups defined by oncogenic pathway activation profiles were associated with recurrence-free survival. These findings require validation in independent patient data sets

(4) PARSONS A, DALEY A, BEGH R, AVEYARD P. **Influence of smoking cessation after diagnosis of early stage lung cancer on prognosis: systematic review of observational studies with meta-analysis**. BMJ. 2010, vol. 340, p.b 5569
http://www.ncbi.nlm.nih.gov/pubmed/20093278 **(Accès libre)**

OBJECTIVE: To systematically review the evidence that smoking cessation after diagnosis of a primary lung tumour affects prognosis. DESIGN: Systematic review with meta-analysis. DATA SOURCES: CINAHL (from 1981), Embase (from 1980), Medline (from 1966), Web of Science (from 1966), CENTRAL (from 1977) to December 2008, and reference lists of included studies. STUDY SELECTION: Randomised controlled trials or observational longitudinal studies that measured the effect of quitting smoking after diagnosis of lung cancer on prognostic outcomes, regardless of stage at presentation or tumour histology, were included. DATA EXTRACTION: Two researchers independently identified studies for inclusion and extracted data. Estimates were combined by using a random effects model, and the I(2) statistic was used to examine heterogeneity. Life tables were used to model five year survival for early stage non-small cell lung cancer and limited stage small cell lung cancer, using death rates for continuing smokers and quitters obtained from this review. RESULTS: In 9/10 included studies, most patients studied were diagnosed as having an early stage lung tumour. Continued smoking was associated with a significantly increased risk of all cause mortality (hazard ratio 2.94, 95% confidence interval 1.15 to 7.54) and recurrence (1.86, 1.01 to 3.41) in early stage non-small cell lung cancer and of all

cause mortality (1.86, 1.33 to 2.59), development of a second primary tumour (4.31, 1.09 to 16.98), and recurrence (1.26, 1.06 to 1.50) in limited stage small cell lung cancer. No study contained data on the effect of quitting smoking on cancer specific mortality or on development of a second primary tumour in non-small cell lung cancer. Life table modelling on the basis of these data estimated 33% five year survival in 65 year old patients with early stage non-small cell lung cancer who continued to smoke compared with 70% in those who quit smoking. In limited stage small cell lung cancer, an estimated 29% of continuing smokers would survive for five years compared with 63% of quitters on the basis of the data from this review. CONCLUSIONS: This review provides preliminary evidence that smoking cessation after diagnosis of early stage lung cancer improves prognostic outcomes. From life table modelling, the estimated number of deaths prevented is larger than would be expected from reduction of cardiorespiratory deaths after smoking cessation, so most of the mortality gain is likely to be due to reduced cancer progression. These findings indicate that offering smoking cessation treatment to patients presenting with early stage lung cancer may be beneficial

(5) PLEASANCE ED, STEPHENS PJ, O'MEARA S, MCBRIDE DJ, *et al.* **A small-cell lung cancer genome with complex signatures of tobacco exposure**. Nature. 2010 Jan. 14, vol. 463, n° 7278, pp.184-190
http://dx.doi.org/10.1038/nature08629 **(Accès payant)**

Cancer is driven by mutation. Worldwide, tobacco smoking is the principal lifestyle exposure that causes cancer, exerting carcinogenicity through >60 chemicals that bind and mutate DNA. Using massively parallel sequencing technology, we sequenced a small-cell lung cancer cell line, NCI-H209, to explore the mutational burden associated with tobacco smoking. A total of 22,910 somatic substitutions were identified, including 134 in coding exons. Multiple mutation signatures testify to the cocktail of carcinogens in tobacco smoke and their proclivities for particular bases and surrounding sequence context. Effects of transcription-coupled repair and a second, more general, expression-linked repair pathway were evident. We identified a tandem duplication that duplicates exons 3-8 of CHD7 in frame, and another two lines carrying PVT1-CHD7 fusion genes, indicating that CHD7 may be recurrently rearranged in this disease. These findings illustrate the potential for next-generation sequencing to provide unprecedented insights into mutational processes, cellular repair pathways and gene networks associated with cancer

(6) TREASURE T, TREASURE J. **Smoking cessation**. BMJ. 2010, vol. 340, p.b5630
http://www.ncbi.nlm.nih.gov/pubmed/20093279

Diabète

sommaire

(1) BARNETT R. **Historical keyword: diabetes**. Lancet. 2010 Jan. 16, vol. 375, n° 9710, p.191
http://dx.doi.org/10.1016/S0140-6736(10)60079-7 **(Accès réservé EHESP)**

(2) FINUCANE TE. **Diabetic polyneuropathy and glucose control**. JAMA. 2010 Feb. 3, vol. 303, n° 5, pp.420-421http://dx.doi.org/10.1001/jama.2010.55 **(Accès réservé EHESP)**

(3) GREGG EW. **Are children the future of type 2 diabetes prevention?** N Engl J Med. 2010 Feb. 11, vol. 362, n° 6, pp.548-550
http://dx.doi.org/10.1056/NEJMe0912192 **(Accès réservé EHESP)**

(4) KEAN S. **Research facilities. Little castle on the prairie**. Science. 2010 Jan. 29, vol. 327, n° 5965, pp.520-521
http://www.ncbi.nlm.nih.gov/pubmed/20110482 **(Accès réservé EHESP)**

(5) LOCATELLI F, DEL VL, CASARTELLI D. **Darbepoetin alfa and chronic kidney disease**. N Engl J Med. 2010 Feb. 18, vol. 362, n° 7, pp.654-655
http://www.ncbi.nlm.nih.gov/pubmed/20187259 **(Accès réservé EHESP)**

(6) PATEL A, NEAL B, CHALMERS J. **Event rates in trials of patients with type 2 diabetes**. JAMA. 2010 Feb. 24, vol. 303, n° 8, p.732
http://dx.doi.org/10.1001/jama.2010.137 **(Accès réservé EHESP)**

(7) PREISS D, SATTAR N, MCMURRAY JJ. **Event rates in trials of patients with type 2 diabetes**. JAMA. 2010 Feb. 24, vol. 303, n° 8, pp.732-733
http://dx.doi.org/10.1001/jama.2010.138 **(Accès réservé EHESP)**

(8) RAMACHANDRAN A, MA RC, SNEHALATHA C. **Diabetes in Asia**. Lancet. 2010 Jan. 30, vol. 375, n° 9712, pp.408-418
http://dx.doi.org/10.1016/S0140-6736(09)60937-5 **(Accès réservé EHESP)**

Prevalence of type 2 diabetes has rapidly increased in native and migrant Asian populations. Diabetes develops at a younger age in Asian populations than in white populations, hence the morbidity and mortality associated with the disease and its complications are also common in young Asian people. The young age of these populations and the high rates of cardiovascular risk factors seen in Asian people substantially increase lifetime risk of cardiovascular disease. Several distinctive features are apparent in pathogenetic factors for diabetes and their thresholds in Asian populations. The economic burden due to diabetes at personal, societal, and national levels is huge. National strategies to raise public awareness about the disease and to improve standard of care and implementation of programmes for primary prevention are urgently needed

(9) WEIKERT C, WEIKERT S, SCHULZE MB, PISCHON T, *et al.* **Presence of gallstones or kidney stones and risk of type 2 diabetes**. Am J Epidemiol. 2010 Feb. 15, vol. 171, n° 4, pp.447-454
http://dx.doi.org/10.1093/aje/kwp411 **(Accès réservé EHESP)**

Recent evidence suggests that gallstones and kidney stones are associated with insulin resistance, but the relation between stone diseases and the risk of developing type 2 diabetes mellitus is not clear. Participants in the European Prospective Investigation into Cancer and Nutrition (EPIC)-Potsdam Study (Potsdam, Germany) provided information about the presence of gallstones and kidney stones at recruitment between 1994 and 1998. On biennial questionnaires, participants reported newly diagnosed type 2 diabetes mellitus, and confirmation was obtained from treating physicians. During a mean follow-up period of 7.0 years between 1994 and 2005, 849 incident cases of type 2 diabetes were identified among 25,166 participants. After adjustment for sex, age, waist circumference, and lifestyle risk factors, persons with reported gallstones (n = 3,293) had an increased risk of type 2 diabetes (relative risk = 1.42, 95% confidence interval: 1.21, 1.68). Among the 23,817 participants with information on reported kidney stones (784 cases of incident diabetes), those who developed kidney stones (n = 2,468) were not at increased risk of diabetes in multivariable-adjusted models (relative risk = 1.05, 95% confidence interval: 0.86, 1.27). These findings suggest that gallstones, but not kidney stones, may predict the risk of developing type 2 diabetes, providing physicians with an interventional opportunity to implement adequate prevention measures

Dépression

sommaire

(1) ANDERSOHN F, WILLICH SN. **Interaction of serotonin reuptake inhibitors with tamoxifen**. BMJ. 2010, vol. 340, p.c783
http://www.ncbi.nlm.nih.gov/pubmed/20142323

(2) KELLY CM, JUURLINK DN, GOMES T, DUONG-HUA M, *et al.* **Selective serotonin reuptake inhibitors and breast cancer mortality in women receiving tamoxifen: a population based cohort study**. BMJ. 2010, vol. 340, p.c693
http://www.ncbi.nlm.nih.gov/pubmed/20142325 **(Accès libre)**

OBJECTIVE: To characterise whether some selective serotonin reuptake inhibitor (SSRI) antidepressants reduce tamoxifen's effectiveness by inhibiting its bioactivation by cytochrome P450 2D6 (CYP2D6). DESIGN: Population based cohort study. PARTICIPANTS: Women living in Ontario aged 66 years or older treated with tamoxifen for breast cancer between 1993 and 2005 who had overlapping treatment with a single SSRI. MAIN OUTCOME MEASURES: Risk of death from breast cancer after completion of tamoxifen treatment, as a function of the proportion of time on tamoxifen during which each SSRI had been co-prescribed. RESULTS: Of 2430 women treated with tamoxifen and a single SSRI, 374 (15.4%) died of breast cancer during follow-up (mean follow-up 2.38 years, SD 2.59). After adjustment for age, duration of tamoxifen treatment, and other potential confounders, absolute increases of 25%, 50%, and 75% in the proportion of time on tamoxifen with overlapping use of paroxetine (an irreversible inhibitor of CYP2D6) were associated with 24%, 54%, and 91% increases in the risk of death from breast cancer, respectively (P<0.05 for each comparison). By contrast, no such risk was seen with other antidepressants. We estimate that use of paroxetine for 41% of tamoxifen treatment (the median overlap in our sample) would result in one additional breast cancer death within five years of cessation of tamoxifen for every 19.7 (95% confidence interval 12.5 to 46.3) patients so treated; the risk with more extensive overlap would be greater. CONCLUSION: Paroxetine use during tamoxifen treatment is associated with an increased risk of death from breast cancer, supporting the hypothesis that paroxetine can reduce or abolish the benefit of tamoxifen in women with breast cancer

(3) MARTINEZ C, ASSIMES TL, MINES D, DELL'ANIELLO S, *et al.* **Use of venlafaxine compared with other antidepressants and the risk of sudden cardiac death or near death: a nested case-control study**. BMJ. 2010, vol. 340, p.c249
http://www.ncbi.nlm.nih.gov/pubmed/20139216 **(Accès libre)**

OBJECTIVE: To assess whether use of the antidepressant venlafaxine is associated with an increased risk of sudden cardiac death or near death compared with other commonly used antidepressants. DESIGN: Population based observational study. SETTING: We did a nested case-control analysis within a new user cohort formed using the United Kingdom General Practice Research Database. PARTICIPANTS: New users of venlafaxine, fluoxetine, citalopram, or dosulepin on or after 1 January 1995, aged 18 to 89 years, with a diagnosis of depression or anxiety. Participants were followed-up until February 2005, or the occurrence of sudden cardiac death or near death, identified from medical records indicating non-fatal acute ventricular tachyarrhythmia, sudden death due to cardiac causes, or out of hospital deaths from acute ischaemic cardiac events. For each case, 30 controls were selected matched for age, sex, calendar time, and indication. We used conditional logistic regression to calculate the adjusted odds ratio of sudden cardiac death or near death associated with current use of venlafaxine compared with current use of fluoxetine, citalopram or dosulepin. RESULTS: 207 384 participants were followed-up for an average of 3.3 years. There were 568 cases of sudden cardiac death or near death, which were matched to 14 812 controls. The adjusted odds ratio of sudden cardiac death or near death associated with venlafaxine use was 0.66 (95% confidence interval 0.38 to 1.14) relative to fluoxetine use, whereas compared with citalopram it was 0.89 (0.50 to 1.60) and with dosulepin 0.83 (0.46 to 1.52). CONCLUSIONS: In this large, population based study, the use of venlafaxine was not associated with an excess risk of sudden cardiac death or near death compared with fluoxetine, dosulepin, or citalopram, in patients with depression or anxiety

(4) MITCHELL SJ, LEWIN A, HORN IB, VALENTINE D, *et al.* **How does violence exposure affect the psychological health and parenting of young African-American mothers?** Soc Sci Med. 2010 Feb., vol. 70, n° 4, pp.526-533
http://dx.doi.org/10.1016/j.socscimed.2009.10.048 **(Accès réservé EHESP)**

Urban, minority, adolescent mothers are particularly vulnerable to violence exposure, which may increase their children's developmental risk through maternal depression and negative parenting. The current study tests a conceptual model of the effects of community and contextual violence exposure on the mental health and parenting of young, African-American mothers living in Washington, DC. A path analysis revealed significant direct effects of witnessed and experienced violence on mothers' depressive symptoms and general aggression. Experiences of discrimination were also associated with increased depressive symptoms. Moreover, there were significant indirect effects of mothers' violence exposure on disciplinary practices through depression and aggression. These findings highlight the range of violence young African-American mothers are exposed to and how these experiences affect their mental health, particularly depressive symptoms, and thus disciplinary practices

(5) OKAMOTO N, FURUSAWA Y, SAKAMOTO K, YAMAMOTO T, *et al.* **Major depression: what caused the crisis?** Lancet. 2010 Jan. 23, vol. 375, n° 9711, p.346
http://dx.doi.org/10.1016/S0140-6736(09)61718-9 **(Accès réservé EHESP)**

(6) TAYLOR D. **Venlafaxine and cardiovascular toxicity**. BMJ. 2010, vol. 340, p.c411
http://www.ncbi.nlm.nih.gov/pubmed/20139219 **(Accès réservé EHESP)**

(7) THAPAR A, COLLISHAW S, POTTER R, THAPAR AK. **Managing and preventing depression in adolescents**. BMJ. 2010, vol. 340, p.c209
http://www.ncbi.nlm.nih.gov/pubmed/20097692 **(Accès réservé EHESP)**

Grippe A

sommaire

(1) **InFACT: a global critical care research response to H1N1**. Lancet. 2010 Jan. 2, vol. 375, n° 9708, pp.11-13
http://dx.doi.org/10.1016/S0140-6736(09)61792-X **(Accès réservé EHESP)**

(2) **Lessons from a pandemic**. Nature. 2010 Jan. 14, vol. 463, n° 7278, pp.135-136
http://dx.doi.org/10.1038/463135b **(Accès payant)**

It is time to assess what worked, and what didn't, in the global efforts to cope with swine flu

(3) **This year in medicine: 2009**. Lancet. 2009 Dec. 19, vol. 374, n° 9707, p.2027
http://dx.doi.org/10.1016/S0140-6736(09)62135-8 **(Accès réservé EHESP)**

(4) BLACK S, ESKOLA J, SIEGRIST CA, HALSEY N, *et al.* **Importance of background rates of disease in assessment of vaccine safety during mass immunisation with pandemic H1N1 influenza vaccines**. Lancet. 2009 Dec. 19, vol. 374, n° 9707, pp.2115-2122
http://dx.doi.org/10.1016/S0140-6736(09)61877-8 **(Accès réservé EHESP)**

Because of the advent of a new influenza A H1N1 strain, many countries have begun mass immunisation programmes. Awareness of the background rates of possible adverse events will be a crucial part of assessment of possible vaccine safety concerns and will help to separate legitimate safety concerns from events that are temporally associated with but not caused by vaccination. We identified background rates of selected medical events for several countries. Rates of disease events varied by age, sex, method of ascertainment, and geography. Highly visible health conditions, such as Guillain-Barre syndrome, spontaneous abortion, or even death, will occur in coincident temporal association with novel influenza vaccination. On the basis of the reviewed data, if a cohort of 10 million individuals was vaccinated in the UK, 21.5 cases of

Guillain-Barre syndrome and 5.75 cases of sudden death would be expected to occur within 6 weeks of vaccination as coincident background cases. In female vaccinees in the USA, 86.3 cases of optic neuritis per 10 million population would be expected within 6 weeks of vaccination. 397 per 1 million vaccinated pregnant women would be predicted to have a spontaneous abortion within 1 day of vaccination

(5) DONALDSON LJ, RUTTER PD, ELLIS BM, GREAVES FE, *et al.* **English mortality from A/H1N1. Comparisons with recent flu mortality**. BMJ. 2010, vol. 340, p.c612
http://www.ncbi.nlm.nih.gov/pubmed/20124383 **(Accès réservé EHESP)**

(6) ECHEVARRIA-ZUNO S, MEJIA-ARANGURE JM, MAR-OBESO AJ, GRAJALES-MUNIZ C, *et al.* **Infection and death from influenza A H1N1 virus in Mexico: a retrospective analysis**. Lancet. 2009 Dec. 19, vol. 374, n° 9707, pp.2072-2079
http://dx.doi.org/10.1016/S0140-6736(09)61638-X **(Accès réservé EHESP)**

BACKGROUND: In April, 2009, the first cases of influenza A H1N1 were registered in Mexico and associated with an unexpected number of deaths. We report the timing and spread of H1N1 in cases, and explore protective and risk factors for infection, severe disease, and death. METHODS: We analysed information gathered by the influenza surveillance system from April 28 to July 31, 2009, for patients with influenza-like illness who attended clinics that were part of the Mexican Institute for Social Security network. We calculated odds ratios (ORs) to compare risks of testing positive for H1N1 in those with influenza-like illness at clinic visits, the risk of admission for laboratory-confirmed cases of H1N1, and of death for inpatients according to demographic characteristics, clinical symptoms, seasonal influenza vaccine status, and elapsed time from symptom onset to admission. FINDINGS: By July 31, 63 479 cases of influenza-like illness were reported; 6945 (11%) cases of H1N1 were confirmed, 6407 (92%) were outpatients, 475 (7%) were admitted and survived, and 63 (<1%) died. Those aged 10-39 years were most affected (3922 [56%]). Mortality rates showed a J-shaped curve, with greatest risk in those aged 70 years and older (10.3%). Risk of infection was lowered in those who had been vaccinated for seasonal influenza (OR 0.65 [95% CI 0.55-0.77]). Delayed admission (1.19 [1.11-1.28] per day) and presence of chronic diseases (6.1 [2.37-15.99]) were associated with increased risk of dying. INTERPRETATION: Risk communication and hospital preparedness are key factors to reduce mortality from H1N1 infection. Protective effects of seasonal influenza vaccination for the virus need to be investigated. FUNDING: None

(7) GAUTRET P, PAROLA P, BROUQUI P. **Risk factors for H1N1 influenza complications in 2009 Hajj pilgrims**. Lancet. 2010 Jan. 16, vol. 375, n° 9710, pp.199-200
http://dx.doi.org/10.1016/S0140-6736(10)60093-1 **(Accès réservé EHESP)**

(8) GREENE SK, KULLDORFF M, LEWIS EM, LI R, *et al.* **Near real-time surveillance for influenza vaccine safety: proof-of-concept in the Vaccine Safety Datalink Project**. Am J Epidemiol. 2010 Jan. 15, vol. 171, n° 2, pp.177-188
http://dx.doi.org/10.1093/aje/kwp345 **(Accès réservé EHESP)**

The emergence of pandemic H1N1 influenza in 2009 has prompted public health responses, including production and licensure of new influenza A (H1N1) 2009 monovalent vaccines. Safety monitoring is a critical component of vaccination programs. As proof-of-concept, the authors mimicked near real-time prospective surveillance for prespecified neurologic and allergic adverse events among enrollees in 8 medical care organizations (the Vaccine Safety Datalink Project) who received seasonal trivalent inactivated influenza vaccine during the 2005/06-2007/08 influenza seasons. In self-controlled case series analysis, the risk of adverse events in a prespecified exposure period following vaccination was compared with the risk in 1 control period for the same individual either before or after vaccination. In difference-in-difference analysis, the relative risk in exposed versus control periods each season was compared with the relative risk in previous seasons since 2000/01. The authors used Poisson-based analysis to compare the risk of Guillain-

Barre syndrome following vaccination in each season with that in previous seasons. Maximized sequential probability ratio tests were used to adjust for repeated analyses on weekly data. With administration of 1,195,552 doses to children under age 18 years and 4,773,956 doses to adults, no elevated risk of adverse events was identified. Near real-time surveillance for selected adverse events can be implemented prospectively to rapidly assess seasonal and pandemic influenza vaccine safety

(9) KAHR V, BARRETT NA, SHANKAR-HARI M, SLACK H, *et al.* **A life-threatening sore throat masquerading as swine flu**. Lancet. 2010 Feb. 6, vol. 375, n° 9713, p.524
http://dx.doi.org/10.1016/S0140-6736(09)61875-4 **(Accès réservé EHESP)**

(10) KELLY H, BARR I. **Large trials confirm immunogenicity of H1N1 vaccines**. Lancet. 2010 Jan. 2, vol. 375, n° 9708, pp.6-9
http://dx.doi.org/10.1016/S0140-6736(09)62132-2 **(Accès réservé EHESP)**

(11) LAGUNA-TORRES VA, BENAVIDES JG. **Infection and death from influenza A H1N1 virus in Mexico**. Lancet. 2009 Dec. 19, vol. 374, n° 9707, pp.2032-2033
http://dx.doi.org/10.1016/S0140-6736(09)61916-4 **(Accès réservé EHESP)**

(12) LAURANCE J. **The swine flu backlash**. Lancet. 2010 Jan. 30, vol. 375, n° 9712, p.367
http://dx.doi.org/10.1016/S0140-6736(10)60154-7 **(Accès réservé EHESP)**

(13) LIANG XF, WANG HQ, WANG JZ, FANG HH, *et al.* **Safety and immunogenicity of 2009 pandemic influenza A H1N1 vaccines in China: a multicentre, double-blind, randomised, placebo-controlled trial**. Lancet. 2010 Jan. 2, vol. 375, n° 9708, pp.56-66
http://dx.doi.org/10.1016/S0140-6736(09)62003-1 **(Accès réservé EHESP)**

BACKGROUND: The current influenza pandemic calls for a safe and effective vaccine. We assessed the safety and immunogenicity of eight formulations of 2009 pandemic influenza A H1N1 vaccine produced by ten Chinese manufacturers. METHODS: In this multicentre, double-blind, randomised trial, 12 691 people aged 3 years or older were recruited in ten centres in China. In each centre, participants were stratified by age and randomly assigned by a random number table to receive one of several vaccine formulations or placebo. The study assessed eight formulations: split-virion formulation containing 7.5 microg, 15 microg, or 30 microg haemagglutinin per dose, with or without aluminium hydroxide adjuvant, and whole-virion formulation containing 5 microg or 10 microg haemagglutinin per dose, with adjuvant. All formulations were produced from the reassortant strain X-179A (A/California/07/2009-A/PR/8/34). We analysed the safety (adverse events), immunogenicity (geometric mean titre [GMT] of haemagglutination inhibition antibody), and seroprotection (GMT >or=1:40) of the formulations. Analysis was by per protocol. Two sites registered their trial with ClinicalTrials.gov, numbers NCT00956111 and NCT00975572. The other eight studies were registered with the State Food and Drug Administration of China. FINDINGS: 12 691 participants received the first dose on day 0, and 12 348 participants received the second dose on day 21. The seroprotection rate 21 days after the first dose of vaccine ranged from 69.5% (95% CI 65.9-72.8) for the 7.5 microg adjuvant split-virion formulation to 92.8% (91.9-93.6) for the 30 microg non-adjuvant split-virion formulation. The seroprotection rate was 86.5% (796 of 920; 84.1-88.7) in recipients of one dose of the 7.5 microg non-adjuvant split-virion vaccine compared with 9.8% (140 of 1432; 8.3-11.4) in recipients of placebo (p<0.0001). One dose of the 7.5 microg non-adjuvant split-virion vaccine induced seroprotection in 178 of 232 children (aged 3 years to <12 years; 76.7%, 70.7-82.0), 211 of 218 adolescents (12 years to <18 years; 96.8%, 93.5-98.7), 289 of 323 adults (18-60 years; 89.5%, 85.6-92.6), and 118 of 147 adults older than 60 years (80.3%, 72.9-86.4), meeting the European Union's licensure criteria for seroprotection in all age-groups. In children, a second dose of the 7.5 microg formulation increased the seroprotection rate to 97.7% (215 of 220, 94.8-99.3). Adverse

reactions were mostly mild or moderate, and self-limited. Severe adverse effects occurred in 69 (0.6%, 0.5-0.8) recipients of vaccine compared with one recipient (0.1%, 0-0.2) of placebo. The most common severe adverse reaction was fever, which occurred in 25 (0.22%; 0.14-0.33) recipients of vaccine after the first dose and four (0.04%; 0.01-0.09) recipients of vaccine after the second dose compared with no recipients of placebo after either dose. INTERPRETATION: One dose of non-adjuvant split-virion vaccine containing 7.5 microg haemagglutinin could be promoted as the formulation of choice against 2009 pandemic influenza A H1N1 for people aged 12 years or older. In children (aged <12 years), two 7.5 mug doses might be needed. FUNDING: Sinovac Biotech, Hualan Biological Bacterin, China National Biotec Group, Beijing Tiantan Biological Products, Changchun Institute of Biological Products, Changchun Changsheng Life Sciences, Jiangsu Yanshen Biological Technology Stock, Zhejiang Tianyuan Bio-Pharmaceutical, Lanzhou Institute of Biological Products, Shanghai Institute of Biological Products, and Dalian Aleph Biomedical

(14) MAHER B. **Swine flu: crisis communicator**. Nature. 2010 Jan. 14, vol. 463, n° 7278, pp.150-152
http://dx.doi.org/10.1038/463150a **(Accès payant)**

(15) MCDOWALL MA. **Spanish flu through BMJ eyes. Prevention by toxic gases?** BMJ. 2010, vol. 340, p.c283 http://www.ncbi.nlm.nih.gov/pubmed/20085973 **(Accès réservé EHESP)**

(16) PFEIFER D, ALFONSO C, WOOD D. **Defining the safety profile of pandemic influenza vaccines**. Lancet. 2010 Jan. 2, vol. 375, n° 9708, pp.9-11
http://dx.doi.org/10.1016/S0140-6736(09)62133-4 **(Accès réservé EHESP)**

(17) PLENNEVAUX E, SHELDON E, BLATTER M, REEVES-HOCHE MK, *et al.* **Immune response after a single vaccination against 2009 influenza A H1N1 in USA: a preliminary report of two randomised controlled phase 2 trials**. Lancet. 2010 Jan. 2, vol. 375, n° 9708, pp.41-48
http://dx.doi.org/10.1016/S0140-6736(09)62026-2 **(Accès réservé EHESP)**

BACKGROUND: Data are needed from large clinical trials of paediatric, adult, and elderly people to find the appropriate antigen dose and vaccination schedule for the 2009 pandemic influenza A H1N1. We therefore report preliminary safety and immunogenicity results after one injection of a licensed monovalent pandemic H1N1 vaccine in the USA. METHODS: We randomly assigned healthy children (aged 6-35 months and 3-9 years) and adults (18-64 years and >or=65 years) to vaccine containing per dose 7.5 microg (children and adults), 15 microg (children and adults), or 30 microg (adults only) haemagglutinin in two placebo-controlled, observer-masked, multicentre phase 2 studies done in the USA. Participants were allocated with an interactive voice-response system or computer-generated randomisation lists with opaque scratchable patches. Primary outcome was haemagglutination inhibition antibody response 21 days after the first of two planned vaccinations (interim analysis of studies in progress). Analyses were by full-analysis set. The trials are registered with ClinicalTrials.gov as NCT00953524 and NCT00952419. FINDINGS: 410 of 423 children and 724 of 750 adults given an active vaccine, and 50 of 51 children and 95 of 99 adults given placebo were assessed for immunogenicity on day 21. After active vaccination, 45 of 101 (45%; 95% CI 35-55) to 47 of 94 (50%; 40-61) infants aged 6-35 months, 75 of 109 (69%; 59-77) to 80 of 106 (75%; 66-83) 3-9-year-old children, 134 of 141 (95%; 90-98) to 144 of 144 (100%; 98-100) of 18-64-year-old adults, and 93 of 100 (93%; 86-96) to 93 of 98 (95%; 89-98) elderly adults were seroprotected (proportion with titres >or=1:40). No vaccine-related serious adverse events occurred. Injection-site and systemic reactions were reported by up to about 50% of every age and vaccine group, with no noticeable differences between vaccine and placebo groups. INTERPRETATION: One dose of vaccine was highly immunogenic in adults, suggesting that it afforded sufficient protection against this pandemic influenza A H1N1 virus. Two doses of vaccine

will probably be needed in children younger than 9 years. Safety and reactogenicity of the vaccine were acceptable and similar to those of seasonal vaccine. FUNDING: Office of the Assistant Secretary for Preparedness and Response, and Biomedical Advanced Research and Development Authority

(18) STONE J. **English mortality from A/H1N1. Discrepancies in published data**. BMJ. 2010, vol. 340, p.c613
http://www.ncbi.nlm.nih.gov/pubmed/20124384 **(Accès réservé EHESP)**

(19) VAJO Z, TAMAS F, SINKA L, JANKOVICS I. **Safety and immunogenicity of a 2009 pandemic influenza A H1N1 vaccine when administered alone or simultaneously with the seasonal influenza vaccine for the 2009-10 influenza season: a multicentre, randomised controlled trial**. Lancet. 2010 Jan. 2, vol. 375, n° 9708, pp.49-55
http://dx.doi.org/10.1016/S0140-6736(09)62039-0 **(Accès réservé EHESP)**

BACKGROUND: With the ongoing 2009 pandemic of influenza A H1N1, development of pandemic influenza vaccines has generated much interest. We investigated the safety and immunogenicity of a whole-virion, inactivated, adjuvanted pandemic H1N1 vaccine in adult and elderly volunteers, given without or simultaneously with the 2009-10 seasonal trivalent influenza vaccine. METHODS: This prospective, randomised study was undertaken in two centres in Hungary. 355 participants, including 203 adults (18-60 years) and 152 elderly people (>60 years), were assigned by stratified randomisation to either 0.5 mL of the pandemic vaccine (Fluval P, a monovalent vaccine with 6 microg haemagglutinin per 0.5 mL content and aluminium phosphate gel adjuvant; n=178) or 0.5 mL of the pandemic vaccine and 0.5 mL of the seasonal trivalent vaccine (Fluval AB, a trivalent inactivated whole-virion influenza vaccine; n=177). All vaccinations were done by specific study personnel, who did not take part in the assessment of safety or immunogenicity. Co-primary objectives were safety and immunogenicity by haemagglutinin inhibition testing. All analyses were done according to a pre-established analysis plan. This study is registered with ClinicalTrials.gov, number NCT01010893. FINDINGS: Two participants receiving the pandemic vaccine only (group 1) and one receiving pandemic and seasonal vaccines (group 2) were lost to follow-up. Participants in both groups developed antibody responses against the pandemic influenza A H1N1 virus (group 1: seroconversion for adults 74.3%, 95% CI 64-6-82.4 and for elderly people 61.3%, 49.1-72.4; group 2: 76.8%, 67.2-84.7 and 81.8%, 71.4-89.7, respectively). Single doses of 6 microg fulfilled European Union and US licensing criteria for interpandemic and pandemic influenza vaccines. Simultaneously, participants in group 2 developed the immune responses needed for licensing for all three seasonal strains in the seasonal vaccine for the 2009-10 season. All adverse events were rare, mild, and transient; the most frequent were pain at injection site (eight cases in group 1 vs 18 in group 2) and fatigue for 1-2 days after vaccination (three vs five cases). INTERPRETATION: The present pandemic vaccine is safe and immunogenic in healthy adult and elderly patients, and needs low doses and only one injection to trigger immune responses to comply with licensing criteria. It can be safely co-administered with the 2009-10 seasonal influenza vaccine. FUNDING: Omninvest, Hungary

(20) WATSON R. **Council of Europe launches investigation into H1N1 pandemic**. BMJ. 2010, vol. 340, p.c641
http://www.ncbi.nlm.nih.gov/pubmed/20123811 **(Accès réservé EHESP)**

Maladies cardio-vasculaires

sommaire

(1) BOGER-MEGIDDO I, HECKBERT SR, WEISS NS, MCKNIGHT B, *et al.* **Myocardial infarction and stroke associated with diuretic based two drug antihypertensive regimens: population based case-control study**. BMJ. 2010, vol. 340, p.c103
http://www.ncbi.nlm.nih.gov/pubmed/20100777 **(Accès libre)**

OBJECTIVE: To examine the association of myocardial infarction and stroke incidence with several commonly used two drug antihypertensive treatment regimens. Design Population based case-control study. Setting Group Health Cooperative, Seattle, WA, USA. PARTICIPANTS: Cases (n=353) were aged 30-79 years, had pharmacologically treated hypertension, and were diagnosed with a first fatal or non-fatal myocardial infarction or stroke between 1989 and 2005. Controls (n=952) were a random sample of Group Health members who had pharmacologically treated hypertension. We excluded individuals with heart failure, evidence of coronary heart disease, diabetes, or chronic kidney disease. Exposures One of three common two drug combinations: diuretics plus beta blockers; diuretics plus calcium channel blockers; and diuretics plus angiotensin converting enzyme inhibitors or angiotensin receptor blockers. MAIN OUTCOME MEASURES: Myocardial infarction or stroke. RESULTS: Compared with users of diuretics plus beta blockers, users of diuretics plus calcium channel blockers had an increased risk of myocardial infarction (adjusted odds ratio (OR) 1.98, 95% confidence interval 1.37 to 2.87) but not of stroke (OR 1.02, 95% CI 0.63 to 1.64). The risks of myocardial infarction and stroke in users of diuretics plus angiotensin converting enzyme inhibitors or angiotensin receptor blockers were slightly but not significantly lower than in users of diuretics plus beta blockers (myocardial infarction: OR 0.76, 95% CI 0.52 to 1.11; stroke: OR 0.71, 95% CI 0.46 to 1.10). CONCLUSIONS: In patients with hypertension, diuretics plus calcium channel blockers were associated with a higher risk of myocardial infarction than other common two drug treatment regimens. A large trial of second line antihypertensive treatments in patients already on low dose diuretics is required to provide a solid basis for treatment recommendations

(2) BREET NJ, VAN WERKUM JW, BOUMAN HJ, KELDER JC, *et al.* **Comparison of platelet function tests in predicting clinical outcome in patients undergoing coronary stent implantation**. JAMA. 2010 Feb. 24, vol. 303, n° 8, pp.754-762
http://dx.doi.org/10.1001/jama.2010.181 **(Accès réservé EHESP)**

CONTEXT: High on-treatment platelet reactivity is associated with atherothrombotic events following coronary stent implantation. OBJECTIVE: To evaluate the capability of multiple platelet function tests to predict clinical outcome. DESIGN, SETTING, AND PATIENTS: Prospective, observational, single-center cohort study of 1069 consecutive patients taking clopidogrel undergoing elective coronary stent implantation between December 2005 and December 2007. On-treatment platelet reactivity was measured in parallel by light transmittance aggregometry, VerifyNow P2Y12 and Plateletworks assays, and the IMPACT-R and the platelet function analysis system (PFA-100) (with the Dade PFA collagen/adenosine diphosphate [ADP] cartridge and Innovance PFA P2Y). Cut-off values for high on-treatment platelet reactivity were established by receiver operating characteristic curve analysis. MAIN OUTCOME MEASUREMENT: The primary end point was defined as a composite of all-cause death, nonfatal acute myocardial infarction, stent thrombosis, and ischemic stroke. The primary safety end point included TIMI (Thrombolysis In Myocardial Infarction) criteria major and minor bleeding. RESULTS: At 1-year follow-up, the primary end point occurred more frequently in patients with high on-treatment platelet reactivity when assessed by light transmittance aggregometry (11.7%; 95% confidence interval [CI], 8.9%-15.0% vs 6.0%; 95% CI, 4.2%-8.2%; P < .001), VerifyNow (13.3%; 95% CI, 10.2%-17.0% vs 5.7%; 95% CI, 4.1%-7.8%; P < .001) and Plateletworks (12.6%; 95% CI, 8.8%-17.2% vs 6.1%; 95% CI, 3.8%-9.2%; P = .005), which also had modest ability to discriminate between patients having and not having a primary event: light transmittance aggregometry (area under the curve [AUC], 0.63; 95% CI, 0.58-0.68), VerifyNow (AUC, 0.62; 95% CI, 0.57-0.67), and Plateletworks (AUC, 0.61; 95% CI, 0.53-0.69). The IMPACT-R, Dade PFA collagen/ADP, and Innovance PFA P2Y were unable to discriminate between patients with and without primary end point at 1-year follow-up (all AUCs included 0.50 in the CI). None of the tests identified patients at risk for

bleeding. CONCLUSIONS: Of the platelet function tests assessed, only light transmittance aggregometry, VerifyNow, and Plateletworks were significantly associated with the primary end point. However, the predictive accuracy of these tests was only modest. None of the tests provided accurate prognostic information to identify low-risk patients at higher risk of bleeding following stent implantation. TRIAL REGISTRATION: clinicaltrials.gov Identifier: NCT00352014

(3) COEBERGH JA. **Thrombolysis in stroke. I'd rather have a stroke in the Netherlands**. BMJ. 2010, vol. 340, p.c454
http://www.ncbi.nlm.nih.gov/pubmed/20103515 **(Accès réservé EHESP)**

(4) DALAL HM, ZAWADA A, JOLLY K, MOXHAM T, *et al.* **Home based versus centre based cardiac rehabilitation: Cochrane systematic review and meta-analysis**. BMJ. 2010, vol. 340, p.b5631
http://www.ncbi.nlm.nih.gov/pubmed/20085991 **(Accès libre)**

OBJECTIVE: To compare the effect of home based and supervised centre based cardiac rehabilitation on mortality and morbidity, health related quality of life, and modifiable cardiac risk factors in patients with coronary heart disease. DESIGN: Systematic review. DATA SOURCES: Cochrane Central Register of Controlled Trials (CENTRAL) in the Cochrane Library, Medline, Embase, CINAHL, and PsycINFO, without language restriction, searched from 2001 to January 2008. REVIEW METHODS: Reference lists checked and advice sought from authors. Included randomised controlled trials that compared centre based cardiac rehabilitation with home based programmes in adults with acute myocardial infarction, angina, or heart failure or who had undergone coronary revascularisation. Two reviewers independently assessed the eligibility of the identified trials and extracted data independently. Authors were contacted when possible to obtain missing information. RESULTS: 12 studies (1938 participants) were included. Most studies recruited patients with a low risk of further events after myocardial infarction or revascularisation. No difference was seen between home based and centre based cardiac rehabilitation in terms of mortality (relative risk 1.31, 95% confidence interval 0.65 to 2.66), cardiac events, exercise capacity (standardised mean difference -0.11, -0.35 to 0.13), modifiable risk factors (weighted mean difference systolic blood pressure (0.58 mm Hg, -3.29 mm Hg to 4.44 mm Hg), total cholesterol (-0.13 mmol/l, -0.31 mmol/l to 0.05 mmol/l), low density lipoprotein cholesterol (-0.15 mmol/l, -0.31 mmol/l to 0.01 mmol/l), or relative risk for proportion of smokers at follow-up (0.98, 0.73 to 1.31)), or health related quality of life, with the exception of high density lipoprotein cholesterol (-0.06, -0.11 to -0.02) mmol/l). In the home based participants, there was evidence of superior adherence. No consistent difference was seen in the healthcare costs of the two forms of cardiac rehabilitation. CONCLUSIONS: Home and centre based forms of cardiac rehabilitation seem to be equally effective in improving clinical and health related quality of life outcomes in patients with a low risk of further events after myocardial infarction or revascularisation. This finding, together with the absence of evidence of differences in patients' adherence and healthcare costs between the two approaches, supports the further provision of evidence based, home based cardiac rehabilitation programmes such as the "Heart Manual." The choice of participating in a more traditional supervised centre based or evidence based home based programme should reflect the preference of the individual patient

(5) EDWARDS AD, BROCKLEHURST P, GUNN AJ, HALLIDAY H, *et al.* **Neurological outcomes at 18 months of age after moderate hypothermia for perinatal hypoxic ischaemic encephalopathy: synthesis and meta-analysis of trial data**. BMJ. 2010, vol. 340, p.c363
http://www.ncbi.nlm.nih.gov/pubmed/20144981 **(Accès réservé EHESP)**

OBJECTIVE: To determine whether moderate hypothermia after hypoxic-ischaemic encephalopathy in neonates improves survival and neurological outcome at 18 months of age. DESIGN: A meta-analysis was performed using a fixed effect model. Risk ratios, risk difference, and number needed to treat, plus 95% confidence intervals, were measured. DATA SOURCES: Studies were identified from the Cochrane central register of controlled trials, the Oxford database of perinatal trials, PubMed, previous reviews, and abstracts. Review methods Reports that

compared whole body cooling or selective head cooling with normal care in neonates with hypoxic-ischaemic encephalopathy and that included data on death or disability and on specific neurological outcomes of interest to patients and clinicians were selected. Results We found three trials, encompassing 767 infants, that included information on death and major neurodevelopmental disability after at least 18 months' follow-up. We also identified seven other trials with mortality information but no appropriate neurodevelopmental data. Therapeutic hypothermia significantly reduced the combined rate of death and severe disability in the three trials with 18 month outcomes (risk ratio 0.81, 95% confidence interval 0.71 to 0.93, P=0.002; risk difference -0.11, 95% CI -0.18 to -0.04), with a number needed to treat of nine (95% CI 5 to 25). Hypothermia increased survival with normal neurological function (risk ratio 1.53, 95% CI 1.22 to 1.93, P<0.001; risk difference 0.12, 95% CI 0.06 to 0.18), with a number needed to treat of eight (95% CI 5 to 17), and in survivors reduced the rates of severe disability (P=0.006), cerebral palsy (P=0.004), and mental and the psychomotor developmental index of less than 70 (P=0.01 and P=0.02, respectively). No significant interaction between severity of encephalopathy and treatment effect was detected. Mortality was significantly reduced when we assessed all 10 trials (1320 infants; relative risk 0.78, 95% CI 0.66 to 0.93, P=0.005; risk difference -0.07, 95% CI -0.12 to -0.02), with a number needed to treat of 14 (95% CI 8 to 47). CONCLUSIONS: In infants with hypoxic-ischaemic encephalopathy, moderate hypothermia is associated with a consistent reduction in death and neurological impairment at 18 months

(6) HALLIDAY A, NORRIS JW. **Carotid artery stenosis**. BMJ. 2010, vol. 340, p.c748
http://www.ncbi.nlm.nih.gov/pubmed/20154051 **(Accès réservé EHESP)**

(7) HAMPL H, KOVESDY CP, KALANTAR-ZADEH K. **Darbepoetin alfa and chronic kidney disease**. N Engl J Med. 2010 Feb. 18, vol. 362, n° 7, p.654
http://www.ncbi.nlm.nih.gov/pubmed/20187260 **(Accès réservé EHESP)**

(8) HAYDEN EC. **Neuroscience: the most vulnerable brains**. Nature. 2010 Jan. 14, vol. 463, n° 7278, pp.154-156
http://dx.doi.org/10.1038/463154a **(Accès payant)**

(9) HENRIKSSON M, PALMER S, CHEN R, DAMANT J, *et al.* **Assessing the cost effectiveness of using prognostic biomarkers with decision models: case study in prioritising patients waiting for coronary artery surgery**. BMJ. 2010, vol. 340, p.b5606
http://www.ncbi.nlm.nih.gov/pubmed/20085988

OBJECTIVE: To determine the effectiveness and cost effectiveness of using information from circulating biomarkers to inform the prioritisation process of patients with stable angina awaiting coronary artery bypass graft surgery. DESIGN: Decision analytical model comparing four prioritisation strategies without biomarkers (no formal prioritisation, two urgency scores, and a risk score) and three strategies based on a risk score using biomarkers: a routinely assessed biomarker (estimated glomerular filtration rate), a novel biomarker (C reactive protein), or both. The order in which to perform coronary artery bypass grafting in a cohort of patients was determined by each prioritisation strategy, and mean lifetime costs and quality adjusted life years (QALYs) were compared. DATA SOURCES: Swedish Coronary Angiography and Angioplasty Registry (9935 patients with stable angina awaiting coronary artery bypass grafting and then followed up for cardiovascular events after the procedure for 3.8 years), and meta-analyses of prognostic effects (relative risks) of biomarkers. RESULTS: The observed risk of cardiovascular events while on the waiting list for coronary artery bypass grafting was 3 per 10,000 patients per day within the first 90 days (184 events in 9935 patients). Using a cost effectiveness threshold of pound20,000- pound30,000 (euro22,000-euro33,000; $32,000-$48,000) per additional QALY, a prioritisation strategy using a risk score with estimated glomerular filtration rate was the most cost effective strategy (cost per additional QALY was < pound410 compared with the Ontario urgency score). The impact on population health of implementing this strategy was 800 QALYs per 100,000 patients at an additional cost of pound 245,000 to the National Health Service. The

prioritisation strategy using a risk score with C reactive protein was associated with lower QALYs and higher costs compared with a risk score using estimated glomerular filtration rate. CONCLUSION: Evaluating the cost effectiveness of prognostic biomarkers is important even when effects at an individual level are small. Formal prioritisation of patients awaiting coronary artery bypass grafting using a routinely assessed biomarker (estimated glomerular filtration rate) along with simple, routinely collected clinical information was cost effective. Prioritisation strategies based on the prognostic information conferred by C reactive protein, which is not currently measured in this context, or a combination of C reactive protein and estimated glomerular filtration rate, is unlikely to be cost effective. The widespread practice of using only implicit or informal means of clinically ordering the waiting list may be harmful and should be replaced with formal prioritisation approaches

(10) HIGGINS RD, SHANKARAN S, LAPTOOK AR. **Hypoxic ischaemic encephalopathy in infants**. BMJ. 2010, vol. 340, p.c397
http://www.ncbi.nlm.nih.gov/pubmed/20144982 **(Accès réservé EHESP)**

(11) KUCK KH, SCHAUMANN A, ECKARDT L, WILLEMS S, *et al.* **Catheter ablation of stable ventricular tachycardia before defibrillator implantation in patients with coronary heart disease (VTACH): a multicentre randomised controlled trial**. Lancet. 2010 Jan. 2, vol. 375, n° 9708, pp.31-40
http://dx.doi.org/10.1016/S0140-6736(09)61755-4 **(Accès réservé EHESP)**

BACKGROUND: In patients with ventricular tachycardia (VT) and a history of myocardial infarction, intervention with an implantable cardioverter defibrillator (ICD) can prevent sudden cardiac death and thereby reduce total mortality. However, ICD shocks are painful and do not provide complete protection against sudden cardiac death. We assessed the potential benefit of catheter ablation before implantation of a cardioverter defibrillator. METHODS: The Ventricular Tachycardia Ablation in Coronary Heart Disease (VTACH) study was a prospective, open, randomised controlled trial, undertaken in 16 centres in four European countries. Patients aged 18-80 years were eligible for enrolment if they had stable VT, previous myocardial infarction, and reduced left-ventricular ejection fraction (LVEF; <or=50%). 110 patients were randomly allocated in a 1:1 ratio to receive catheter ablation and an ICD (ablation group, n=54) or ICD alone (control group, n=56). Randomisation was done by computer-generated randomly permuted blocks and stratified by centre and LVEF (<or=30% or >30%). Patients were followed up for at least 1 year. The primary endpoint was the time to first recurrence of VT or ventricular fibrillation (VF). Analysis was by intention to treat (ITT). This study is registered with ClinicalTrials.gov, number NCT00919373. FINDINGS: 107 patients were included in the ITT population (ablation group, n=52; control group, n=55). Two patients (one in each group) withdrew consent immediately after randomisation without any follow-up data and one patient (ablation group) was excluded because of a protocol violaton. Mean follow-up was 22.5 months (SD 9.0). Time to recurrence of VT or VF was longer in the ablation group (median 18.6 months [lower quartile 2.4, upper quartile not determinable]) than in the control group (5.9 months [IQR 0.8-26.7]). At 2 years, estimates for survival free from VT or VF were 47% in the ablation group and 29% in the control group (hazard ratio 0.61; 95% CI 0.37-0.99; p=0.045). Complications related to the ablation procedure occurred in two patients; no deaths occurred within 30 days after ablation. 15 device-related complications requiring surgical intervention occurred in 13 patients (ablation group, four; control group, nine). Nine patients died during the study (ablation group, five; control group, four). INTERPRETATION: Prophylactic VT ablation before defibrillator implantation seemed to prolong time to recurrence of VT in patients with stable VT, previous myocardial infarction, and reduced LVEF. Prophylactic catheter ablation should therefore be considered before implantation of a cardioverter defibrillator in such patients. FUNDING: St Jude Medical

(12) LOCATELLI F, DEL VL, CASARTELLI D. **Darbepoetin alfa and chronic kidney disease**. N Engl J Med. 2010 Feb. 18, vol. 362, n° 7, pp.654-655
http://www.ncbi.nlm.nih.gov/pubmed/20187259 **(Accès réservé EHESP)**

(13) MA YH, FEI Z. **Management of chronic subdural haematoma**. Lancet. 2010 Jan. 16, vol. 375, n° 9710, pp.195-196
http://dx.doi.org/10.1016/S0140-6736(10)60084-0 **(Accès réservé EHESP)**

(14) MAYOR S. **Stroke strategy in England is improving acute care, shows audit**. BMJ. 2010, vol. 340, p.c687
http://www.ncbi.nlm.nih.gov/pubmed/20130003 **(Accès réservé EHESP)**

(15) MEIER P, KNAPP G, TAMHANE U, CHATURVEDI S, *et al.* **Short term and intermediate term comparison of endarterectomy versus stenting for carotid artery stenosis: systematic review and meta-analysis of randomised controlled clinical trials**. BMJ. 2010, vol. 340, p.c467
http://www.ncbi.nlm.nih.gov/pubmed/20154049 **(Accès réservé EHESP)**

OBJECTIVE: To evaluate the relative short term safety and intermediate term efficacy of carotid endarterectomy versus carotid artery stenting. DESIGN: Systematic review and meta-analysis. DATA SOURCES: BIOSIS, Embase, Medline, the Cochrane central register of controlled trials, International Pharmaceutical Abstracts database, ISI Web of Science, and Google scholar and bibliographies, from 1 January 1990 to 25 July 2009. STUDY SELECTION: Randomised controlled trials comparing carotid endarterectomy with carotid artery stenting in patients with carotid artery stenosis with or without symptoms. DATA EXTRACTION: Primary end point was a composite of mortality or stroke. Secondary end points were death, stroke, myocardial infarction, or facial neuropathy (as individual end points), and mortality or disabling stroke (as a composite end point). DATA SYNTHESIS: 11 trials were included (4796 patients); 10 reported on short term outcomes (n=4709) and nine on intermediate term outcomes (1-4 years). The periprocedural risk of mortality or stroke was lower for carotid endarterectomy (odds ratio 0.67, 95% confidence interval 0.47 to 0.95; P=0.025) than for carotid stenting, mainly because of a decreased risk of stroke (0.65, 0.43 to 1.00; P=0.049), whereas the risk of death (1.14, 0.56 to 2.31; P=0.727) and the composite end point mortality or disabling stroke (0.74, 0.53 to 1.05; P=0.088) did not differ significantly. The odds of periprocedural myocardial infarction (2.69, 1.06 to 6.79; P=0.036) or cranial nerve injury (10.2, 4.0 to 26.1; P<0.001) was higher in the carotid endarterectomy group than in the carotid stenting group. In the intermediate term, the two treatments did not differ significantly for stroke or death (hazard ratio 0.90, 95% confidence interval 0.74 to 1.1; P=0.314). CONCLUSIONS: Carotid endarterectomy was found to be superior to carotid artery stenting for short term outcomes but the difference was not significant for intermediate term outcomes; this difference was mainly driven by non-disabling stroke. Significantly fewer cranial nerve injuries and myocardial infarctions occurred with carotid artery stenting

(16) MINNERUP J, SCHABITZ WR. **Darbepoetin alfa and chronic kidney disease**. N Engl J Med. 2010 Feb. 18, vol. 362, n° 7, pp.653-654
http://www.ncbi.nlm.nih.gov/pubmed/20187258 **(Accès réservé EHESP)**

(17) MORRISH PK. **Thrombolysis in stroke. Stroke and neurological illness: the real lottery**. BMJ. 2010, vol. 340, p.c457
http://www.ncbi.nlm.nih.gov/pubmed/20103517 **(Accès réservé EHESP)**

(18) RAHIMI-MOVAGHAR V, RASOULI MR, ALBRIGHT AL. **Management of chronic subdural haematoma**. Lancet. 2010 Jan. 16, vol. 375, n° 9710, pp.195-196
http://dx.doi.org/10.1016/S0140-6736(10)60083-9 **(Accès réservé EHESP)**

(19) ROSENTHAL RL, GRIMSLEY BR. **Images in clinical medicine. Kinked carotids**. N Engl J Med. 2010 Feb. 4, vol. 362, n° 5, p.448

http://dx.doi.org/10.1056/NEJMicm0901403 **(Accès réservé EHESP)**

(20) SMITH B. **Thrombolysis in stroke. It's more about the evidence**. BMJ. 2010, vol. 340, p.c455 http://www.ncbi.nlm.nih.gov/pubmed/20103516 **(Accès réservé EHESP)**

(21) STONE JH, PAPALIODIS GN, DUNBAR MR, STONE JR. **Case records of the Massachusetts General Hospital. Case 4-2010. A 53-year-old man with arthralgias, oral ulcers, vision loss, and vocal-cord paralysis**. N Engl J Med. 2010 Feb. 11, vol. 362, n° 6, pp.537-546 http://dx.doi.org/10.1056/NEJMcpc0910090 **(Accès réservé EHESP)**

(22) TYRRELL PJ, SHERRINGTON C, WAINWRIGHT J, SMITH C, *et al.* **Thrombolysis in stroke. Example of a health divide?** BMJ. 2010, vol. 340, p.c449 http://www.ncbi.nlm.nih.gov/pubmed/20103513 **(Accès réservé EHESP)**

(23) WRIGHT RJ, KANAGASUNDARAM NS, QUINTON R. **Darbepoetin alfa and chronic kidney disease**. N Engl J Med. 2010 Feb. 18, vol. 362, n° 7, p.653 http://dx.doi.org/10.1056/NEJMc0912452 **(Accès réservé EHESP)**

Maladies liées à l'alcool

sommaire

(1) HASTINGS G, BROOKS O, STEAD M, ANGUS K, *et al.* **Failure of self regulation of UK alcohol advertising**. BMJ. 2010, vol. 340, p.b5650 http://www.ncbi.nlm.nih.gov/pubmed/20089576 **(Accès réservé EHESP)**

(2) MOROJELE NK, LONDON L, OLORUNJU SA, MATJILA MJ, *et al.* **Predictors of risk of alcohol-exposed pregnancies among women in an urban and a rural area of South Africa**. Soc Sci Med. 2010 Feb., vol. 70, n° 4, pp.534-542 http://dx.doi.org/10.1016/j.socscimed.2009.10.040 **(Accès réservé EHESP)**

The study sought to determine the prevalence and predictors of being at risk of an alcohol-exposed pregnancy (AEP) among women of child-bearing age in an urban and rural location in South Africa. We conducted a cross-sectional household survey of 1018 women aged 18-44 years in one urban (n=606) and one rural (n=412) site. The women were interviewed using a structured questionnaire. We defined the primary dependent variable, being at risk of having an AEP, as current alcohol use, not being pregnant, being fertile, and no effective use of contraceptives. The independent variables included demographic, substance use, health perceptions, psycho-social, and partner characteristics. The rural women (21.84%) were more likely than their urban counterparts (11.22%) to be at risk of an AEP. In multiple logistic regression analyses, significant predictors of being in the "at risk" group for the urban women were (a) being 'white' as opposed to 'black/African', and being 'coloured' as opposed to 'black/African'; and (b) current smoking. For the rural women, significant risk factors were (a) current smoking and (b) early onset of alcohol use. The significant protective factors were (a) education; (b) knowledge about Fetal Alcohol Syndrome; (c) parity. Use of stricter alcohol use criteria (i.e., three or more drinks and five or more drinks per sitting) in the definition of risk of an AEP yielded slightly different patterns of significant predictors. The results revealed high levels of risk of an alcohol-exposed pregnancy, especially amongst the rural women, and a need for location-specific prevention programmes. The high burden of AEP in South Africa calls for the establishment of national AEP prevention strategies and programmes as a matter of urgency

(3) NASH KL, HIRSCHFIELD GM. **A massive haematemesis**. BMJ. 2010, vol. 340, p.b5534 http://www.ncbi.nlm.nih.gov/pubmed/20106882 **(Accès réservé EHESP)**

(4) TORRAZZA-PEREZ E, CARRENO N. **Images in clinical medicine. Bleeding esophageal varices**. N Engl J Med. 2010 Feb. 4, vol. 362, n° 5, p.e13
http://dx.doi.org/10.1056/NEJMicm0807812 **(Accès réservé EHESP)**

Paludisme

sommaire

(1) **Learning to share**. Nature. 2010 Jan. 28, vol. 463, n° 7280, p.401
http://dx.doi.org/10.1038/463401a **(Accès payant)**

(2) BUTLER D. **Aid fund faces cash crunch**. Nature. 2010 Jan. 28, vol. 463, n° 7280, p.415
http://dx.doi.org/10.1038/463415a **(Accès payant)**

(3) HAWASS Z, GAD YZ, ISMAIL S, KHAIRAT R, *et al.* **Ancestry and pathology in King Tutankhamun's family**. JAMA. 2010 Feb. 17, vol. 303, n° 7, pp.638-647

http://dx.doi.org/10.1001/jama.2010.121 **(Accès réservé EHESP)**

CONTEXT: The New Kingdom in ancient Egypt, comprising the 18th, 19th, and 20th dynasties, spanned the mid-16th to the early 11th centuries bc. The late 18th dynasty, which included the reigns of pharaohs Akhenaten and Tutankhamun, was an extraordinary time. The identification of a number of royal mummies from this era, the exact relationships between some members of the royal family, and possible illnesses and causes of death have been matters of debate. OBJECTIVES: To introduce a new approach to molecular and medical Egyptology, to determine familial relationships among 11 royal mummies of the New Kingdom, and to search for pathological features attributable to possible murder, consanguinity, inherited disorders, and infectious diseases. DESIGN: From September 2007 to October 2009, royal mummies underwent detailed anthropological, radiological, and genetic studies as part of the King Tutankhamun Family Project. Mummies distinct from Tutankhamun's immediate lineage served as the genetic and morphological reference. To authenticate DNA results, analytical steps were repeated and independently replicated in a second ancient DNA laboratory staffed by a separate group of personnel. Eleven royal mummies dating from circa 1410-1324 bc and suspected of being kindred of Tutankhamun and 5 royal mummies dating to an earlier period, circa 1550-1479 bc, were examined. MAIN OUTCOME MEASURES: Microsatellite-based haplotypes in the mummies, generational segregation of alleles within possible pedigree variants, and correlation of identified diseases with individual age, archeological evidence, and the written historical record. RESULTS: Genetic fingerprinting allowed the construction of a 5-generation pedigree of Tutankhamun's immediate lineage. The KV55 mummy and KV35YL were identified as the parents of Tutankhamun. No signs of gynecomastia and craniosynostoses (eg, Antley-Bixler syndrome) or Marfan syndrome were found, but an accumulation of malformations in Tutankhamun's family was evident. Several pathologies including Kohler disease II were diagnosed in Tutankhamun; none alone would have caused death. Genetic testing for STEVOR, AMA1, or MSP1 genes specific for Plasmodium falciparum revealed indications of malaria tropica in 4 mummies, including Tutankhamun's. These results suggest avascular bone necrosis in conjunction with the malarial infection as the most likely cause of death in Tutankhamun. Walking impairment and malarial disease sustained by Tutankhamun is supported by the discovery of canes and an afterlife pharmacy in his tomb. CONCLUSION: Using a multidisciplinary scientific approach, we showed the feasibility of gathering data on Pharaonic kinship and diseases and speculated about individual causes of death

Pathologies liées à l'obésité

sommaire

(1) BLUMENTHAL K, VOLPP KG. **Enhancing the effectiveness of food labeling in restaurants**. JAMA. 2010 Feb. 10, vol. 303, n° 6, pp.553-554
http://dx.doi.org/10.1001/jama.2010.85 **(Accès réservé EHESP)**

(2) FALAGAS ME, KARAGEORGOPOULOS DE. **Adjustment of dosing of antimicrobial agents for bodyweight in adults**. Lancet. 2010 Jan. 16, vol. 375, n° 9710, pp.248-251
http://dx.doi.org/10.1016/S0140-6736(09)60743-1 **(Accès réservé EHESP)**

(3) FRANKS PW, HANSON RL, KNOWLER WC, SIEVERS ML, *et al.* **Childhood obesity, other cardiovascular risk factors, and premature death**. N Engl J Med. 2010 Feb. 11, vol. 362, n° 6, pp.485-493
http://dx.doi.org/10.1056/NEJMoa0904130 **(Accès réservé EHESP)**

BACKGROUND: The effect of childhood risk factors for cardiovascular disease on adult mortality is poorly understood. METHODS: In a cohort of 4857 American Indian children without diabetes (mean age, 11.3 years; 12,659 examinations) who were born between 1945 and 1984, we assessed whether body-mass index (BMI), glucose tolerance, and blood pressure and cholesterol levels predicted premature death. Risk factors were standardized according to sex and age. Proportional-hazards models were used to assess whether each risk factor was associated with time to death occurring before 55 years of age. Models were adjusted for baseline age, sex, birth cohort, and Pima or Tohono O'odham Indian heritage. RESULTS: There were 166 deaths from endogenous causes (3.4% of the cohort) during a median follow-up period of 23.9 years. Rates of death from endogenous causes among children in the highest quartile of BMI were more than double those among children in the lowest BMI quartile (incidence-rate ratio, 2.30; 95% confidence interval [CI], 1.46 to 3.62). Rates of death from endogenous causes among children in the highest quartile of glucose intolerance were 73% higher than those among children in the lowest quartile (incidence-rate ratio, 1.73; 95% CI, 1.09 to 2.74). No significant associations were seen between rates of death from endogenous or external causes and childhood cholesterol levels or systolic or diastolic blood-pressure levels on a continuous scale, although childhood hypertension was significantly associated with premature death from endogenous causes (incidence-rate ratio, 1.57; 95% CI, 1.10 to 2.24). CONCLUSIONS: Obesity, glucose intolerance, and hypertension in childhood were strongly associated with increased rates of premature death from endogenous causes in this population. In contrast, childhood hypercholesterolemia was not a major predictor of premature death from endogenous causes

(4) GREGG EW. **Are children the future of type 2 diabetes prevention?** N Engl J Med. 2010 Feb. 11, vol. 362, n° 6, pp.548-550
http://dx.doi.org/10.1056/NEJMe0912192 **(Accès réservé EHESP)**

(5) HALFON N, NEWACHECK PW. **Evolving notions of childhood chronic illness**. JAMA. 2010 Feb. 17, vol. 303, n° 7, pp.665-666
http://dx.doi.org/10.1001/jama.2010.130 **(Accès réservé EHESP)**

(6) LIVINGSTON EH. **Surgical treatment of obesity in adolescence**. JAMA. 2010 Feb. 10, vol. 303, n° 6, pp.559-560
http://dx.doi.org/10.1001/jama.2010.99 **(Accès réservé EHESP)**

(7) LJUNGVALL A, GERDTHAM UG. **More equal but heavier: a longitudinal analysis of income-related obesity inequalities in an adult Swedish cohort**. Soc Sci Med. 2010 Jan., vol. 70, n° 2, pp.221-231

http://dx.doi.org/10.1016/j.socscimed.2009.10.014 **(Accès réservé EHESP)**

Using longitudinal data over a 17-year period for a Swedish cohort aged 20-68 in 1980/1981, this study analyses income-related inequalities in obesity. By using the concentration index and decomposition techniques we answer the following questions: We find that among females, inequalities in obesity favour the rich, but the inequality declines over time. Income itself is the main driving force behind obesity inequality, whereas being single (as opposed to being married or cohabiting) is an important counteracting factor. The main reason for the reduced obesity inequality over time is increased obesity prevalence, because in absolute terms obesity has increased uniformly across income groups. Because the income elasticity of obesity is the single most important contributor to the inequality, policies directed towards this factor might be the most effective for reducing obesity inequality. Our main income variable is within-individual mean of income, and we thereby focus on long-run inequality and are able to standardize for income mobility. The results show that inequality based on short-run income differs substantially from inequality based on long-run income. For males we find similar inequality trends as for women, although less pronounced. This difference between men and women should be taken into account when evaluating obesity reducing policies

(8) MAYNARD MJ, BAKER G, RAWLINS E, ANDERSON A, *et al.* **Developing obesity prevention interventions among minority ethnic children in schools and places of worship: The DEAL (DiEt and Active Living) study**. BMC Public Health. 2009, vol. 9, p.480
http://dx.doi.org/10.1186/1471-2458-9-480 **(Accès libre)**

BACKGROUND: Childhood obesity is a major public health concern with serious implications for the sustainability of healthcare systems. Studies in the US and UK have shown that ethnicity is consistently associated with childhood obesity, with Black African origin girls in particular being more vulnerable to overweight and obesity than their White peers. Little is known, however, about what promotes or hinders engagement with prevention programmes among ethnic minority children. METHODS/DESIGN: This paper describes the background and design of an exploratory study conducted in London, UK. The aim of the study was to assess the feasibility, efficacy and cultural acceptability of child- and family-based interventions to reduce risk factors for childhood and adolescent obesity among ethnic minorities. It investigated the use of a population approach (in schools) and a targeted approach (in places of worship). We used a mixture of focus group discussions, in-depth interviews and structured questionnaires to explore what children, parents, grandparents, teachers and religious leaders think hinder and promote engagement with healthy eating and active living choices. We assessed the cultural appropriateness of validated measures of physical activity, dietary behaviour and self efficacy, and of potential elements of interventions informed by the data collected. We are also currently assessing the potential for wider community support (local councils, community networks, faith forums etc) of the intervention. DISCUSSION: Analysis of the data is ongoing but the emergent findings suggest that while the school setting may be better for the main implementation of healthy lifestyle interventions, places of worship provide valuable opportunities for family and culturally specific support for implementation. Tackling the rise in childhood and adolescent obesity is a policy priority, as reflected in a range of government initiatives. The study will enhance such policy by developing the evidence base about culturally acceptable interventions to reduce the risk of obesity in children

(9) MEINHOLD CL, RON E, SCHONFELD SJ, ALEXANDER BH, *et al.* **Nonradiation risk factors for thyroid cancer in the US Radiologic Technologists Study**. Am J Epidemiol. 2010 Jan. 15, vol. 171, n° 2, pp.242-252
http://dx.doi.org/10.1093/aje/kwp354 **(Accès réservé EHESP)**

The incidence of thyroid cancer has been rapidly increasing in the United States, but few risk factors have been established. The authors prospectively examined the associations of self-reported medical history, anthropometric factors, and behavioral factors with thyroid cancer risk among 90,713 US radiologic technologists (69,506 women and 21,207 men) followed from 1983 through 2006. Incident thyroid cancers in 242 women and 40 men were reported. Elevated risks were observed for women with benign thyroid conditions (hazard ratio (HR) = 2.35, 95%

confidence interval (CI): 1.73, 3.20), benign breast disease (HR = 1.56, 95% CI: 1.08, 2.26), asthma (HR = 1.68, 95% CI: 1.00, 2.83), and body mass index > or =35.0 versus 18.5-24.9 kg/m(2) (HR = 1.74, 95% CI: 1.03, 2.94; P-trend = 0.04). Current smoking was inversely associated with thyroid cancer risk (HR = 0.54). No clear associations emerged for reproductive factors, other medical conditions, alcohol intake, or physical activity. Despite few thyroid cancers in men, men with benign thyroid conditions had a significantly increased risk of thyroid cancer (HR = 4.65, 95% CI: 1.62, 13.34), and results for other risk factors were similar to those for women. Consistent with prior studies, obesity and benign thyroid conditions increased and current smoking decreased the risk of thyroid cancer. The novel findings for benign breast disease and asthma warrant further investigation

(10) O'BRIEN PE, SAWYER SM, LAURIE C, BROWN WA, *et al.* **Laparoscopic adjustable gastric banding in severely obese adolescents: a randomized trial**. JAMA. 2010 Feb. 10, vol. 303, n° 6, pp.519-526
http://dx.doi.org/10.1001/jama.2010.81 **(Accès réservé EHESP)**

CONTEXT: Adolescent obesity is a common and serious health problem affecting more than 5 million young people in the United States alone. Bariatric surgery is being evaluated as a possible treatment option. Laparoscopic adjustable gastric banding (gastric banding) has the potential to provide a safe and effective treatment. OBJECTIVE: To compare the outcomes of gastric banding with an optimal lifestyle program on adolescent obesity. DESIGN, SETTING, AND PATIENTS: A prospective, randomized controlled trial of 50 adolescents between 14 and 18 years with a body mass index (BMI) higher than 35, recruited from the Melbourne, Australia, community, assigned either to a supervised lifestyle intervention or to undergo gastric banding, and followed up for 2 years. The study was performed between May 2005 and September 2008. MAIN OUTCOME MEASURES: Weight loss. Secondary outcomes included change in metabolic syndrome, insulin resistance, quality of life, and adverse outcomes. RESULTS: Twenty-four of 25 patients in the gastric banding group and 18 of 25 in lifestyle group completed the study. Twenty-one (84%) in the gastric banding and 3 (12%) in the lifestyle groups lost more than 50% of excess weight, corrected for age. Overall, the mean changes in the gastric banding group were a weight loss of 34.6 kg (95% CI, 30.2-39.0), representing an excess weight loss of 78.8% (95% CI, 66.6%-91.0%), 12.7 BMI units (95% CI, 11.3-14.2), and a BMI z score change from 2.39 (95% CI, 2.05-2.73) to 1.32 (95% CI, 0.98-1.66). The mean losses in the lifestyle group were 3.0 kg (95% CI, 2.1-8.1), representing excess weight loss of 13.2% (95% CI, 2.6%-21.0%), 1.3 BMI units (95% CI, 0.4-2.9), and a BMI z score change from 2.41 (95% CI, 2.21-2.66) to 2.26 (95% CI, 1.91-2.43). At entry, 9 participants (36%) in the gastric banding group and 10 (40%) in the lifestyle group had the metabolic syndrome. At 24 months, none of the gastric banding group had the metabolic syndrome (P = .008; McNemar chi(2)) compared with 4 of the 18 completers (22%) in the lifestyle group (P = .13). The gastric banding group experienced improved quality of life with no perioperative adverse events. However, 8 operations (33%) were required in 7 patients for revisional procedures either for proximal pouch dilatation or tubing injury during follow-up. CONCLUSIONS: Among obese adolescent participants, use of gastric banding compared with lifestyle intervention resulted in a greater percentage achieving a loss of 50% of excess weight, corrected for age. There were associated benefits to health and quality of life. TRIAL REGISTRATION: ANZCTR Identifier: 12605000160639

(11) SAYBURN A. **Withdrawal of sibutramine leaves European doctors with just one obesity drug**. BMJ. 2010, vol. 340, p.c477
http://www.ncbi.nlm.nih.gov/pubmed/20100781 **(Accès réservé EHESP)**

(12) SHIRI R, KARPPINEN J, LEINO-ARJAS P, SOLOVIEVA S, *et al.* **The association between obesity and low back pain: a meta-analysis**. Am J Epidemiol. 2010 Jan. 15, vol. 171, n° 2, pp.135-154
http://dx.doi.org/10.1093/aje/kwp356 **(Accès réservé EHESP)**

This meta-analysis assessed the association between overweight/obesity and low back pain. The authors systematically searched the Medline (National Library of Medicine, Bethesda, Maryland) and Embase (Elsevier, Amsterdam, the Netherlands) databases until May 2009. Ninety-five studies were reviewed and 33 included in the meta-analyses. In cross-sectional studies, obesity was associated with increased prevalence of low back pain in the past 12 months (pooled odds ratio (OR) = 1.33, 95% confidence interval (CI): 1.14, 1.54), seeking care for low back pain (OR = 1.56, 95% CI: 1.46, 1.67), and chronic low back pain (OR = 1.43, 95% CI: 1.28, 1.60). Compared with non-overweight people, overweight people had a higher prevalence of low back pain but a lower prevalence of low back pain compared with obese people. In cohort studies, only obesity was associated with increased incidence of low back pain for > or =1 day in the past 12 months (OR = 1.53, 95% CI: 1.22, 1.92). Results remained consistent after adjusting for publication bias and limiting the analyses to studies that controlled for potential confounders. Findings indicate that overweight and obesity increase the risk of low back pain. Overweight and obesity have the strongest association with seeking care for low back pain and chronic low back pain

(13) TANNE JH. **Michelle Obama launches programme to combat US childhood obesity**. BMJ. 2010, vol. 340, p.c948
http://www.ncbi.nlm.nih.gov/pubmed/20156917

(14) TORPY JM, LYNM C, GLASS RM. **JAMA patient page. Bariatric surgery**. JAMA. 2010 Feb. 10, vol. 303, n° 6, p.576
http://dx.doi.org/10.1001/jama.303.6.576 **(Accès réservé EHESP)**

(15) VAN CJ, GORTMAKER SL, PERRIN JM. **Dynamics of obesity and chronic health conditions among children and youth**. JAMA. 2010 Feb. 17, vol. 303, n° 7, pp.623-630
http://dx.doi.org/10.1001/jama.2010.104 **(Accès réservé EHESP)**

CONTEXT: Rates of obesity and other childhood chronic conditions have increased over recent decades. Patterns of how conditions change over time have not been widely examined. OBJECTIVE: To evaluate change in prevalence of obesity and other chronic conditions in US children, including incidence, remission, and prevalence. DESIGN, SETTING, AND PARTICIPANTS: Prospective study using the National Longitudinal Survey of Youth-Child Cohort (1988-2006) of 3 nationally representative cohorts of children. Children were aged 2 through 8 years at the beginning of each study period, and cohorts were followed up for 6 years, from 1988 to 1994 (cohort 1, n = 2337), 1994 to 2000 (cohort 2, n = 1759), and 2000 to 2006 (n = 905). MAIN OUTCOME MEASURES: Parent report of a child having a health condition that limited activities or schooling or required medicine, special equipment, or specialized health services and that lasted at least 12 months. Obesity was defined as a body mass index at or above the 95th percentile for age. Chronic conditions were grouped into 4 categories: obesity, asthma, other physical conditions, and behavior/learning problems. RESULTS: The end-study prevalence of any chronic health condition was 12.8% (95% confidence interval [CI], 11.2%-14.5%) for cohort 1 in 1994, 25.1% (95% CI, 22.7%-27.6%) for cohort 2 in 2000, and 26.6% (95% CI, 23.5%-29.9%) for cohort 3 in 2006. There was substantial turnover in chronic conditions: 7.4% (95% CI, 6.5%-8.3%) of participants in all cohorts had a chronic condition at the beginning of the study that persisted to the end, 9.3% (95% CI, 8.3%-10.3%) reported conditions at the beginning that resolved within 6 years, and 13.4% (95% CI, 12.3%-14.6%) had new conditions that arose during the 6-year study period. The prevalence of having a chronic condition during any part of the 6-year study period was highest for cohort 3 (51.5%; 95% CI, 47.3%-55.0%), and there were higher rates among male (adjusted odds ratio [AOR], 1.24; 95% CI, 1.07-1.42), Hispanic (AOR, 1.36; 95% CI, 1.11-1.67), and black (AOR, 1.60; 95% CI, 1.35-1.90) youth. CONCLUSIONS: Prevalence of chronic conditions among children and youth increased from 1988 to 2006. However, presence of these conditions was dynamic over each 6-year cohort

(16) WILLIAMS G. **Withdrawal of sibutramine in Europe**. BMJ. 2010, vol. 340, p.c824
http://www.ncbi.nlm.nih.gov/pubmed/20144986

SIDA

sommaire

(1)'T HE. **Pharmaceutical companies and the UNITAID patent pool**. Lancet. 2010 Jan. 2, vol. 375, n° 9708, p.30
http://dx.doi.org/10.1016/S0140-6736(09)62189-9 **(Accès réservé EHESP)**

(2) ALSOP Z. **Ugandan bill could hinder progress on HIV/AIDS**. Lancet. 2009 Dec. 19, vol. 374, n° 9707, pp.2043-2044
http://dx.doi.org/10.1016/S0140-6736(09)62139-5 **(Accès réservé EHESP)**

(3) BUTLER D. **Aid fund faces cash crunch**. Nature. 2010 Jan. 28, vol. 463, n° 7280, p.415
http://dx.doi.org/10.1038/463415a **(Accès payant)**

(4) BUZKOVA P, BROWN ER, JOHN-STEWART GC. **Longitudinal data analysis for generalized linear models under participant-driven informative follow-up: an application in maternal health epidemiology**. Am J Epidemiol. 2010 Jan. 15, vol. 171, n° 2, pp.189-197
http://dx.doi.org/10.1093/aje/kwp353 (**Accès réservé EHESP**)

It is common in longitudinal studies for scheduled visits to be accompanied by as-needed visits due to medical events occurring between scheduled visits. If the timing of these as-needed visits is related to factors that are associated with the outcome but are not among the regression model covariates, naively including these as-needed visits in the model yields biased estimates. In this paper, the authors illustrate and discuss the key issues pertaining to inverse intensity rate ratio (IIRR)-weighted generalized estimating equations (GEE) methods in the context of a study of Kenyan mothers infected with human immunodeficiency virus type 1 (1999-2005). The authors estimated prevalences and prevalence ratios for morbid conditions affecting the women during a 1-year postpartum follow-up period. Of the 484 women under study, 62% had at least 1 as-needed visit. Use of a standard GEE model including both scheduled and unscheduled visits predicted a pneumonia prevalence of 2.9% (95% confidence interval: 2.3%, 3.5%), while use of the IIRR-weighted GEE predicted a prevalence of 1.5% (95% confidence interval: 1.2%, 1.8%). The estimate obtained using the IIRR-weighted GEE approach was compatible with estimates derived using scheduled visits only. These results highlight the importance of properly accounting for informative follow-up in these studies

(5) CELUM C, WALD A, LINGAPPA JR, MAGARET AS, *et al.* **Acyclovir and transmission of HIV-1 from persons infected with HIV-1 and HSV-2**. N Engl J Med. 2010 Feb. 4, vol. 362, n° 5, pp.427-439
http://dx.doi.org/10.1056/NEJMoa0904849 **(Accès réservé EHESP)**

BACKGROUND: Most persons who are infected with human immunodeficiency virus type 1 (HIV-1) are also infected with herpes simplex virus type 2 (HSV-2), which is frequently reactivated and is associated with increased plasma and genital levels of HIV-1. Therapy to suppress HSV-2 reduces the frequency of reactivation of HSV-2 as well as HIV-1 levels, suggesting that suppression of HSV-2 may reduce the risk of transmission of HIV-1. METHODS: We conducted a randomized, placebo-controlled trial of suppressive therapy for HSV-2 (acyclovir at a dose of 400 mg orally twice daily) in couples in which only one of the partners was seropositive for HIV-1 (CD4 count, > or = 250 cells per cubic millimeter) and that partner was also infected with HSV-2 and was not taking antiretroviral therapy at the time of enrollment. The primary end point was transmission of HIV-1 to the partner who was not initially infected with HIV-1; linkage of transmissions was assessed by means of genetic sequencing of viruses. RESULTS: A total of 3408 couples were enrolled at 14 sites in Africa. Of the partners who were infected with HIV-1,

68% were women, and the baseline median CD4 count was 462 cells per cubic millimeter. Of 132 HIV-1 seroconversions that occurred after randomization (an incidence of 2.7 per 100 person-years), 84 were linked within couples by viral sequencing: 41 in the acyclovir group and 43 in the placebo group (hazard ratio with acyclovir, 0.92, 95% confidence interval [CI], 0.60 to 1.41; P=0.69). Suppression with acyclovir reduced the mean plasma concentration of HIV-1 by 0.25 log(10) copies per milliliter (95% CI, 0.22 to 0.29; P<0.001) and the occurrence of HSV-2-positive genital ulcers by 73% (risk ratio, 0.27; 95% CI, 0.20 to 0.36; P<0.001). A total of 92% of the partners infected with HIV-1 and 84% of the partners not infected with HIV-1 remained in the study for 24 months. The level of adherence to the dispensed study drug was 96%. No serious adverse events related to acyclovir were observed. CONCLUSIONS: Daily acyclovir therapy did not reduce the risk of transmission of HIV-1, despite a reduction in plasma HIV-1 RNA of 0.25 log(10) copies per milliliter and a 73% reduction in the occurrence of genital ulcers due to HSV-2. (ClinicalTrials.gov number, NCT00194519.)

(6) COLE SR, NAPRAVNIK S, MUGAVERO MJ, LAU B, *et al.* **Copy-years viremia as a measure of cumulative human immunodeficiency virus viral burden**. Am J Epidemiol. 2010 Jan. 15, vol. 171, n° 2, pp.198-205
http://dx.doi.org/10.1093/aje/kwp347 **(Accès réservé EHESP)**

Plasma human immunodeficiency virus type 1 (HIV-1) viral load is a valuable tool for HIV research and clinical care but is often used in a noncumulative manner. The authors developed copy-years viremia as a measure of cumulative plasma HIV-1 viral load exposure among 297 HIV seroconverters from the Multicenter AIDS Cohort Study (1984-1996). Men were followed from seroconversion to incident acquired immunodeficiency syndrome (AIDS), death, or the beginning of the combination antiretroviral therapy era (January 1, 1996); the median duration of follow-up was 4.6 years (interquartile range (IQR), 2.7-6.5). The median viral load and level of copy-years viremia over 2,281 semiannual follow-up assessments were 29,628 copies/mL (IQR, 8,547-80,210) and 63,659 copies x years/mL (IQR, 15,935-180,341). A total of 127 men developed AIDS or died, and 170 survived AIDS-free and were censored on January 1, 1996, or lost to follow-up. Rank correlations between copy-years viremia and other measures of viral load were 0.56-0.87. Each log(10) increase in copy-years viremia was associated with a 1.70-fold increased hazard (95% confidence interval: 0.94, 3.07) of AIDS or death, independently of infection duration, age, race, CD4 cell count, set-point, peak viral load, or most recent viral load. Copy-years viremia, a novel measure of cumulative viral burden, may provide prognostic information beyond traditional single measures of viremia

(7) DE WA. **HIV/AIDS and the challenges of security and conflict**. Lancet. 2010 Jan. 2, vol. 375, n° 9708, pp.22-23
http://dx.doi.org/10.1016/S0140-6736(09)62175-9 **(Accès réservé EHESP)**

(8) ERON JJ, YOUNG B, COOPER DA, YOULE M, *et al.* **Switch to a raltegravir-based regimen versus continuation of a lopinavir-ritonavir-based regimen in stable HIV-infected patients with suppressed viraemia (SWITCHMRK 1 and 2): two multicentre, double-blind, randomised controlled trials**. Lancet. 2010 Jan. 30, vol. 375, n° 9712, pp.396-407
http://dx.doi.org/10.1016/S0140-6736(09)62041-9 **(Accès réservé EHESP)**

BACKGROUND: To reduce lipid abnormalities and other side-effects associated with antiretroviral regimens containing lopinavir-ritonavir, patients might want to switch one or more components of their regimen. We compared substitution of raltegravir for lopinavir-ritonavir with continuation of lopinavir-ritonavir in HIV-infected patients with stable viral suppression on lopinavir-ritonavir-based combination therapy. METHODS: The SWITCHMRK 1 and 2 studies were multicentre, double-blind, double-dummy, phase 3, randomised controlled trials. HIV-infected patients aged 18 years or older were eligible if they had documented viral RNA (vRNA) concentration below the limit of assay quantification for at least 3 months while on a lopinavir-ritonavir-based regimen. 707 eligible patients were randomly allocated by interactive voice response system in a 1:1 ratio to switch from lopinavir-ritonavir to raltegravir (400 mg twice daily; n=353) or to remain on lopinavir-ritonavir

(two 200 mg/50 mg tablets twice daily; n=354), while continuing background therapy consisting of at least two nucleoside or nucleotide reverse transcriptase inhibitors. Primary endpoints were the mean percentage change in serum lipid concentrations from baseline to week 12; the proportion of patients with vRNA concentration less than 50 copies per mL at week 24 (with all treated patients who did not complete the study counted as failures) with a prespecified non-inferiority margin of -12% for each study; and the frequency of adverse events up to 24 weeks. Analyses were done according to protocol. These trials are registered with ClinicalTrials.gov, numbers NCT00443703 and NCT00443729. FINDINGS: 702 patients received at least one dose of study drug and were included in the efficacy and safety analyses for the combined trials (raltegravir, n=350; lopinavir-ritonavir, n=352). Percentage changes in lipid concentrations from baseline to week 12 were significantly greater (p<0.0001) in the raltegravir group than in the lopinavir-ritonavir group in each study, yielding combined results for total cholesterol -12.6%vs 1.0%, non-HDL cholesterol -15.0%vs 2.6%, and triglycerides -42.2%vs 6.2%. At week 24, 293 (84.4%, 95% CI 80.2-88.1) of 347 patients in the raltegravir group had vRNA concentration less than 50 copies per mL compared with 319 (90.6%, 87.1-93.5) of 352 patients in the lopinavir-ritonavir group (treatment difference -6.2%, -11.2 to -1.3). Clinical and laboratory adverse events occurred at similar frequencies in the treatment groups. There were no serious drug-related adverse events or deaths. The only drug-related clinical adverse event of moderate to severe intensity reported in 1% or more of either treatment group was diarrhoea, which occurred in ten patients in the lopinavir-ritonavir group (3%) and no patients in the raltegravir group. The studies were terminated at week 24 because of lower than expected virological efficacy in the raltegravir group compared with the lopinavir-ritonavir group. INTERPRETATION: Although switching to raltegravir was associated with greater reductions in serum lipid concentrations than was continuation of lopinavir-ritonavir, efficacy results did not establish non-inferiority of raltegravir to lopinavir-ritonavir. FUNDING: Merck

(9) GUATELLI J. **How innate immunity can inhibit the release of HIV-1 from infected cells**. N Engl J Med. 2010 Feb. 11, vol. 362, n° 6, pp.553-554
http://dx.doi.org/10.1056/NEJMcibr0911557 **(Accès réservé EHESP)**

(10) JAFFAR S, AMURON B, FOSTER S, BIRUNGI J, *et al.* **Rates of virological failure in patients treated in a home-based versus a facility-based HIV-care model in Jinja, southeast Uganda: a cluster-randomised equivalence trial**. Lancet. 2009 Dec. 19, vol. 374, n° 9707, pp.2080-2089
http://dx.doi.org/10.1016/S0140-6736(09)61674-3 **(Accès réservé EHESP)**

BACKGROUND: Identification of new ways to increase access to antiretroviral therapy in Africa is an urgent priority. We assessed whether home-based HIV care was as effective as was facility-based care. METHODS: We undertook a cluster-randomised equivalence trial in Jinja, Uganda. 44 geographical areas in nine strata, defined according to ratio of urban and rural participants and distance from the clinic, were randomised to home-based or facility-based care by drawing sealed cards from a box. The trial was integrated into normal service delivery. All patients with WHO stage IV or late stage III disease or CD4-cell counts fewer than 200 cells per microL who started antiretroviral therapy between Feb 15, 2005, and Dec 19, 2006, were eligible, apart from those living on islands. Follow-up continued until Jan 31, 2009. The primary endpoint was virological failure, defined as RNA more than 500 copies per mL after 6 months of treatment. The margin of equivalence was 9% (equivalence limits 0.69-1.45). Analyses were by intention to treat and adjusted for baseline CD4-cell count and study stratum. This trial is registered at http://isrctn.org, number ISRCTN 17184129. FINDINGS: 859 patients (22 clusters) were randomly assigned to home and 594 (22 clusters) to facility care. During the first year, 93 (11%) receiving home care and 66 (11%) receiving facility care died, 29 (3%) receiving home and 36 (6%) receiving facility care withdrew, and 8 (1%) receiving home and 9 (2%) receiving facility care were lost to follow-up. 117 of 729 (16%) in home care had virological failure versus 80 of 483 (17%) in facility care: rates per 100 person-years were 8.19 (95% CI 6.84-9.82) for home and 8.67 (6.96-10.79) for facility care (rate ratio [RR] 1.04, 0.78-1.40; equivalence shown). Two patients from each group were

immediately lost to follow-up. Mortality rates were similar between groups (0.95 [0.71-1.28]). 97 of 857 (11%) patients in home and 75 of 592 (13%) in facility care were admitted at least once (0.91, 0.64-1.28). INTERPRETATION: This home-based HIV-care strategy is as effective as is a clinic-based strategy, and therefore could enable improved and equitable access to HIV treatment, especially in areas with poor infrastructure and access to clinic care

(11) KILBY JM. **Switching HIV therapies: competing host and viral factors**. Lancet. 2010 Jan. 30, vol. 375, n° 9712, pp.352-354
http://dx.doi.org/10.1016/S0140-6736(10)60067-0 **(Accès réservé EHESP)**

(12) PAPE J. **Global health. Haiti's quake shifts clinic's focus from AIDS to aid. Interview by Jon Cohen**. Science. 2010 Jan. 29, vol. 327, n° 5965, p.509
http://dx.doi.org/10.1126/science.327.5965.509 **(Accès réservé EHESP)**

(13) SMITH RJ, OKANO JT, KAHN JS, BODINE EN, *et al.* **Evolutionary dynamics of complex networks of HIV drug-resistant strains: the case of San Francisco**. Science. 2010 Feb. 5, vol. 327, n° 5966, pp.697-701
http://www.ncbi.nlm.nih.gov/pubmed/20075214 **(Accès réservé EHESP)**

Over the past two decades, HIV resistance to antiretroviral drugs (ARVs) has risen to high levels in the wealthier countries of the world, which are able to afford widespread treatment. We have gained insights into the evolution and transmission dynamics of ARV resistance by designing a biologically complex multistrain network model. With this model, we traced the evolutionary history of ARV resistance in San Francisco and predict its future dynamics. By using classification and regression trees, we identified the key immunologic, virologic, and treatment factors that increase ARV resistance. Our modeling shows that 60% of the currently circulating ARV-resistant strains in San Francisco are capable of causing self-sustaining epidemics, because each individual infected with one of these strains can cause, on average, more than one new resistant infection. It is possible that a new wave of ARV-resistant strains that pose a substantial threat to global public health is emerging

Tuberculose

sommaire

(1) BUTLER D. **Aid fund faces cash crunch**. Nature. 2010 Jan. 28, vol. 463, n° 7280, p.415
http://dx.doi.org/10.1038/463415a **(Accès payant)**

(2) REHM J, PARRY C. **Alcohol consumption and infectious diseases in South Africa**. Lancet. 2009 Dec. 19, vol. 374, n° 9707, p.2053
http://dx.doi.org/10.1016/S0140-6736(09)62150-4 **(Accès réservé EHESP)**

Rapports et dossiers en ligne

Nouvelle publication :

Enjeux politiques de l'évaluation du Fonds mondial de lutte contre le sida, la tuberculose et le paludisme / KEROUEDAN D / 2010 / document

Cancer du poumon

sommaire

Associations Between Duration of Illicit Drug Use and Health Conditions: Results from the 2005–2007 National Surveys on Drug Use and Health. Annals of Epidemiology, Article in Press 19 février 2010
http://dx.doi.org/10.1016/j.annepidem.2010.01.003 **(Accès réservé EHESP)**

Systemic antiangiogenic activity of cationic poly-L-lysine dendrimer delays tumor growth
Proceedings of the National Academy of Sciences, Early Edition 11 février 2010
http://dx.doi.org/10.1073/pnas.0908401107

Overall survival with cisplatin–gemcitabine and bevacizumab or placebo as first-line therapy for nonsquamous non-small-cell lung cancer: results from a randomised phase III trial (AVAiL).
Annals of Oncology, Advance Access 11 février 2010
http://dx.doi.org/10.1093/annonc/mdq020 **(Accès libre)**

Evaluating the Older Patient with Cancer: Understanding Frailty and the Geriatric Assessment
CA: A Cancer Journal for Clinicians, Published Online 19 février 2010
http://dx.doi.org/10.3322/caac.20059 **(Accès libre)**

Survival outcomes with the use of surgery in limited-stage small cell lung cancer: Should its role be re-evaluated ? *Cancer*, Vol. 116 (5), pp. 1350-1357, 2010
http://www3.interscience.wiley.com/journal/123243175/abstract?CRETRY=1&SRETRY=0 **(Accès Payant)**

Perceived Cancer Risk: Why Is It Lower Among Nonwhites than Whites ?
Cancer Epidemiology Biomarkers and Prevention, Published Online 16 février 2010
http://cebp.aacrjournals.org/content/early/2010/02/15/1055-9965.EPI-09-1085.abstract **(Accès Payant)**

Economic Analysis: Randomized Placebo-Controlled Clinical Trial of Erlotinib in Advanced Non–Small Cell Lung Cancer.Journal of the National Cancer Institute, Advance Access 16 février 2010
http://dx.doi.org/10.1093/jnci/djp518 **(Accès Payant)**

Dépression

sommaire

Rapport fait à la demande du Premier ministre
Bien-être et efficacité au travail – 10 propositions pour améliorer la santé psychologique au travail- Henri LACHMANN, Christian LAROSE, Muriel PENICAUD. Février 2010
http://www.gouvernement.fr/sites/default/files/fichiers_joints/Rapport_-Bien-etre_et_efficacite_au_travail-.pdf

Acupuncture for Depression During Pregnancy : A Randomized Controlled Trial. Manber, Rachel PhD; Schnyer, Rosa N. Obstetrics and Gynecology. March 2010 - Volume 115 - Issue 3 - pp 511-520.
http://journals.lww.com/greenjournal/Fulltext/2010/03000/Acupuncture_for_Depression_During_Pregnancy__A.7.aspx **(Accès libre)**

Diabète

sommaire

Effect of a French Experiment of Team Work between General Practitioners and Nurses on Efficacy and Cost of Type 2 Diabetes Patients Care
L'impact d'une expérimentation française de travail en équipe, entre généralistes et infirmières, sur l'efficacité et les coûts du suivi des patients diabétiques de type 2
IRDS.Document de travail n° 29. 2010/01
http://www.irdes.fr/EspaceAnglais/Publications/WorkingPapers/DT29EffectExperGenePractiNursesDiabetPatientsCare.pdf **(Accès libre)**

Leptin therapy in insulin-deficient type I diabetes. May-yun Wang, Lijun Chen, Gregory O. Clark.PNAS. 1 Mars 2010.
http://dx.doi.org/10.1073/pnas.0909422107

Grippe A

sommaire

Face à la grippe A(H1N1) et à la mutation des virus, que peuvent faire chercheurs et pouvoirs publics ?(compte rendu de l'audition publique du 1er décembre 2009).Assemblée nationale n°2226 et Sénat n°204. http://www.senat.fr/rap/r09-204/r09-2041.pdf **(Accès libre)**

Rapport d'étape : Mutation des virus et gestion des pandémies - L'exemple du virus A(H1N1).Assemblée nationale. 19 Février 2010 / n° 2314
http://www.assemblee-nationale.fr/13/rap-off/i2314.asp **(Accès libre)**

Investigation de cas groupés de grippe A (H1N1) 2009 au collège de Quint-Fonsegrives, Haute-Garonne Juin 2009. INVS.
Rapport **(Accès libre)**

Nouveau communiqué sur la grippe A (H1N1)v. Acédémie nationale de Médecine. 9 Février 2010.
http://www.academie-medecine.fr/detailPublication.cfm?idRub=27&idLigne=1778

Maladie d'Alzheimer

sommaire

Expérimentation d'une formation sur les aspects relationnels de la prise en charge de patients atteints de la maladie d'Alzheimer. Pin (S)., Verheye (J.C.), Vincent (I.)/ Saint-Denis : INPES, 2007, 28p.
http://www.inpes.sante.fr/evaluation/pdf/evaluation-sante_2008_04.pdf **(Accès libre)**

^{11}C-PiB PET assessment of change in fibrillar amyloid-β load in patients with Alzheimer's disease treated with bapineuzumab: a phase 2, double-blind, placebo-controlled, ascending-dose study. Juha O Rinne MD, David J Brooks MD, Martin N Rossor FRCP,[et al]. The Lancet Neurology. 26 Février 2010 http://dx.doi.org/10.1016/S1474-4422(10)70043-0 **(Accès réservé EHESP)**

Maladies cardio-vasculaires

sommaire

Document de cadrage - Utilisation des marqueurs cardiaques dans la maladie coronarienne et l'insuffisance cardiaque chez l'adulte en médecine ambulatoire. HAS. Février 2010. http://www.has-sante.fr/portail/upload/docs/application/pdf/2010-02/document_cadrage_marqueurs_cardiaques.pdf **(Accès libre)**

Mortality From Major Cardiovascular Diseases: United States, 2007 / Arialdi M. Miniño, M.P.H., Division of Vital Statistics; and Richard J. Klein, M.P.H., Office of Analysis and Epidemiology.CDC. March 2010. http://www.cdc.gov/nchs/data/hestat/cardio2007/cardio2007.pdf **(Accès libre)**

Maladies chroniques

sommaire

Actes du colloque national **"Mieux vivre au quotidien avec une maladie chronique" -** 22 et 23 octobre 2009 - Collection Santé et société numéro 15
Actes **(Accès libre)** sur le Ministère de la santé et des sports.

Sociodemographic and comorbidity profiles of chronic migraine and episodic migraine sufferers DC Buse, A Manack, D Serrano , C Turkel, R B Lipton. J Neurol Neurosurg Psychiatry. 17 February 2010 http://dx.doi.org/10.1136/jnnp.2009.192492 **(Accès payant)**

Maladies infectieuses

sommaire

Chikungunya disease in nonhuman primates involves long-term viral persistence in macrophages / Karine Labadie, Thibaut Larcher, Christophe Joubert, Abdelkrim Mannioui [et al]. Journal of Clinical Investigation. 1 Mars 2010
http://www.jci.org/articles/view/40104/pdf **(Accès libre)**

Pathologies liées à l'obésité

sommaire

Baromètre santé nutrition 2008 – 3e vague Inpes. Janvier 2010.
http://www.inpes.sante.fr/CFESBases/catalogue/pdf/1270.pdf **(Accès libre)**
http://www.inpes.sante.fr/70000/dp/10/dp100126.pdf **(Accès libre)**

Improving Lifestyles, Tackling Obesity: The Health and Economic Impact of Prevention Strategies. OCDE. novembre 2009 / document de travail n° 48.
http://www.olis.oecd.org/olis/2009doc.nsf/LinkTo/NT00006EF2/$FILE/JT03274746.PDF **(Accès libre)**

Adipocyte-Derived Factors Potentiate Nutrient-Induced Production of Plasminogen Activator Inhibitor–1 by Macrophages. Preeti Kishore, Weijie Li, Julia Tonelli, [et al] Science Translational Medecine. http://dx.doi.org/10.1126/scitranslmed.3000292

Principaux faits et chiffres sur l'obésité. OMS. Février 2010.
http://www.who.int/features/factfiles/obesity/fr/index.html **(Accès libre)**

SIDA

sommaire

Rapport Annuel de la Cour des comptes. 9 Fevrier 2010
http://www.ccomptes.fr/fr/CC/Sommaire-23.html **(Accès libre)**
La politique de lutte contre le VIH/SIDA

Deux synthèses canadiennes par le Centre de Collaboration Nationale des Maladies Infectieuses (CCNMI)
-Les interventtions en matière de prévention de la transmission du VIH chez les couples sérodiscordants.CCNMI. - Janvier 2010. - 4 p. synthèse **(Accès libre)**

-Méthodes de contraception à l'intention des femmes séropositivezs pour le VIH et des femmes à risque pour le VIH.CCNMI. - Février 2010. - 6 p. synthèse **(Accès libre)**

Guide : Positive prevention : prevention strategies for people living with HIV / FPA India, INP+ , Inde, IPPF , Londres / 2010 / document **(Accès libre)**

Objectif 11 : renforcer les actions d'éducation à la sexualité, intégrant les dimensions VIH, VHB et IST, chez les jeunes, notamment les jeunes en difficulté / ORS, GRSP, Ile-de-France / 2009 / document **(Accès libre)**

Objectif 21 : diminuer les nouvelles contaminations par le VIH et les IST dans les populations prioritaires / ORS, GRSP, Ile-de-France / 2009 / document**(Accès libre)**

Objectif 22 : chez les personnes séropositives, améliorer la qualité de vie, induire une observance accrue des traitements et une réduction des prises de risque / ORS, GRSP, Ile-de-France / 2009 / document **(Accès libre)**

Influence of Adherent and Effective Antiretroviral Therapy Use on Human Papillomavirus Infection and Squamous Intraepithelial Lesions in Human Immunodeficiency Virus–Positive Women. Journal of Infectious Diseases, vol.201 (5), pp. 681-690, 2010
http://dx.doi.org/10.1086/650467**(Accès libre)**

Clinical science meets social science : gender and aids vaccine research / IAVI , Etats-Unis, ICRW , Washington / 2008 / document **(Accès libre)**

Tuberculose

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Rapport scientifique
Vaccination par le BCG chez les enfants nés après la suspension de l'obligation vacinale et suivis dans les PMI de France - Couverture vaccinale, pratiques vaccinales et connaissances de la politique vaccinale par les médecins vaccinateurs - Rapport final -19 février 2010 **(Accès libre)**

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