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Citation 1.

Title
Routine monitoring and assessment of adults living with HIV: Results of the British HIV Association (BHIVA) national audit 2015.
Source
BMC Infectious Diseases. 17 (1) (no pagination), 2017. Article Number: 619. Date of Publication: 13 Sep 2017.
Author
Freedman A.; Angus B.; Asboe D.; Burns F.; Byrne R.; Chadwick D.; Churchill D.; Curtis H.; Delpech V.; Doerholt K.; Molloy A.; Musonda J.; Naous N.; Olarinde O.; Ong E.; Raffe S.; Sabin C.; Sullivan A.;
Abstract
Background: The clinical care of people living with HIV changed fundamentally as a result of the development of effective antiretroviral therapy (ART). HIV infection is now a long-term treatable condition. We report a national audit to assess adherence to British HIV Association guidelines for the routine investigation and monitoring of adult HIV-1-infected individuals.
Method(s): All UK sites known as providers of adult HIV outpatient services were invited to complete a case-note review and a brief survey of local clinic practices. Participating sites were asked to randomly select 50-100 adults, who attended for specialist HIV care during 2014 and/or 2015. Each site collected data electronically using a self-audit spreadsheet tool. This included demographic details (gender, ethnicity, HIV exposure, and age) and whether 22 standardised and pre-defined clinical audited outcomes had been recorded.
Result(s): Data were collected on 8258 adults from 123 sites, representing approximately 10% of people living with HIV reported in public health surveillance as attending UK HIV services. Sexual health screening was provided within 96.4% of HIV services, cervical cytology and influenza vaccination within 71.4% of HIV services. There was wide variation in resistance testing across sites. Only 44.9% of patients on ART had a documented 10-year CVD risk within the past three years and fracture risk had been assessed within the past three years for only 16.7% patients aged over 50 years.
Conclusion(s): There was high participation in the national audit and good practice was identified in some areas. However improvements can be made in monitoring of cardiovascular risk, bone and sexual health.
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Year of Publication

2017

Citation 2.
Title
The benefit of the doubt or doubts over benefits? A systematic literature review of perceived risks of vaccines in European populations.
Source
Vaccine. 35 (37) (pp 4840-4850), 2017. Date of Publication: 5 September 2017.
Author
Karafillakis E.; Larson H.J.;
Abstract
Objectives The success of vaccination strategies depends in part on population perceptions of benefits and risks of vaccines and related confidence in vaccination. Better knowledge of public concerns about vaccines and what is driving them is needed to inform vaccination strategies and communications. This literature reviewer examined studies on vaccine and vaccination risk perceptions and concerns across European populations. Methods A systematic literature review was conducted to identify studies published between 2004 and 2014 in Europe. A descriptive analysis was performed. Findings A total of 145 articles were selected, most of which were conducted in the UK, the Netherlands and France and studied seasonal influenza, HPV and pandemic influenza vaccination. Across all countries and vaccines, the primary area of concern was vaccine safety, followed by perceptions of low likelihood of contracting vaccine-preventable diseases (VPDs), perceived low severity of VPDs, beliefs that vaccines do not work, and overall lack of information. Concerns were found to be vaccine-, country- and population-specific. Conclusion In addition to identifying concerns about vaccination in Europe, this study confirmed the notion that individuals have many safety concerns about vaccination and often believe that the risks of vaccination outweigh their benefits. More research needs to be conducted to explore the impact of different types of communication strategies, which would frame the benefits of vaccination as well as risks of not vaccinating. Strategies to better inform public perceptions of vaccines should include the provision of unbiased, comprehensive information tailored to population information needs, and delivered using multiple and new communication technologies such as social media.
Copyright © 2017
Year of Publication
2017

Citation 3.
Title
Risk of recurrence of adverse events following immunization: A systematic review.
Source
Pediatrics. 140 (3) (no pagination), 2017. Article Number: e20163707. Date of Publication: September 2017.
Author
Zafack J.G.; De Serres G.; Kiely M.; Gariepy M.-C.; Rouleau I.; Top K.A.-M.;
Abstract
CONTEXT: Reimmunizing patients who had an adverse event following immunization (AEFI) is sometimes a challenge because there are limited data on the risk and severity of AEFI recurrence.
OBJECTIVE(S): To summarize the literature on the risk of AEFI recurrence. DATA SOURCES: PubMed, Embase, and Cochrane library. STUDY SELECTION: We included articles in English or French published before September 30, 2016. Articles were selected if they estimated the risk of AEFI recurrence in at least 5 individuals. Studies with experimental vaccines were excluded. DATA

EXTRACTION: Data on study design, setting, population, vaccines, and AEFI recurrence were extracted.
RESULT(S): Twenty-nine articles were included. Among patients with a history of hypotonic hyporesponsive episode (n = 398), anaphylaxis (n = 133), or seizures (n = 60) who were reimmunized, events recurred in 0% to 0.8%. Allergic-like events recurred in 30 of 594 reimmunized patients. Fever recurred in 0% to 84% of 836 reimmunized patients, depending on the vaccine and dose number. Among children with extensive limb swelling after the fourth dose of diphtheria-tetanus-acellular pertussis vaccine, recurrence was higher when the fifth dose was given withthe full-antigen formulation (78%) compared with the reduced-antigen formulation (53%, P = .02) LIMITATIONS: Many studies, included few patients, and those with severe AEFIs were often not reimmunized.
CONCLUSION(S): Despite vaccines being administered to millions of people annually, there are few studies in which researchers evaluated AEFI recurrence. Published studies suggest that reimmunization is usually safe. However in these studies, severe cases were often not reimmunized.
Copyright © 2017 by the American Academy of Pediatrics.

Year of Publication

2017

Citation 4.

Title

Healthcare worker influenza vaccination and sickness absence - An ecological study.

Source

Clinical Medicine, Journal of the Royal College of Physicians of London. 17 (6) (pp 484-489), 2017. Date of Publication: 01 Dec 2017.

Author

Pereira M.; Williams S.; Restrick L.; Cullinan P.; Hopkinson N.S.;

Abstract

Although Influenza vaccination is recommended for healthcare workers, vaccination rates in UK healthcare workers are only around 50%. We investigated the association between NHS sickness absence rates (using data from Health and Social Care Information Centre quarterly reports), staff vaccination rates and influenza vaccine efficacy (from Public Health England), influenza deaths (from the Office of National Statistics) and staff satisfaction (from www.NHSstaffsurveys.com). Data from 223 healthcare trusts covered approximately 800,000 staff in each of four influenza seasons from 2011; overall staff sickness rate was roughly 4.5%. Annual vaccination rates varied between 44% and 54%. Higher NHS trust vaccination rates were associated with reduced sickness absence (beta = -0.425 [95% CI -0.658 to -0.192], p<0.001). Thus, a 10% increase in vaccination rate would be associated with a 10% fall in sickness absence rate. Influenza vaccination for NHS staff is associated with reduced sickness absence rates.
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Year of Publication

2017

Citation 5.

Title

Effect of 2 years of treatment with sublingual grass pollen immunotherapy on nasal response to allergen challenge at 3 years among patients with moderate to severe seasonal allergic rhinitis: The GRASS randomized clinical trial.

Source

JAMA - Journal of the American Medical Association. 317 (6) (pp 615-625), 2017. Date of Publication: 14 Feb 2017.

Author

Scadding G.W.; Calderon M.A.; Shamji M.H.; Eifan A.O.; Penagos M.; Dumitru F.; Sever M.L.; Bahnson H.T.; Lawson K.; Harris K.M.; Plough A.G.; Panza J.L.; Qin T.; Lim N.; Tchao N.K.; Togias A.; Durham S.R.; Goldstone A.; Rozakeas F.; Yan R.; Klimowska-Nassar N.; Poon M.; Cheung D.K.; Ito C.; Layhadi J.; Lemm E.; Macfarlane E.; MacMahon O.; Matsuoka T.; Parkin R.; Switzer A.; Asare A.; Chani E.; Evind J.; Phippard D.; Sayre P.; Sharkey M.; Whitehouse D.; Adah S.; Allio T.; Czarniecki C.; Shah J.; Mason T.; Nguyen A.; Gibbs S.; Childress S.;

Abstract
IMPORTANCE Sublingual immunotherapy and subcutaneous immunotherapy are effective in seasonal allergic rhinitis. Three years of continuous treatment with subcutaneous immunotherapy and sublingual immunotherapy has been shown to improve symptoms for at least 2 years following discontinuation of treatment. OBJECTIVE To assess whether 2 years of treatment with grass pollen sublingual immunotherapy, comparedwithplacebo, providesimprovednasalresponsetoallergenchallengeat3-yearfollow-up. DESIGN, SETTING, AND PARTICIPANTS A randomized double-blind, placebo-controlled, 3-parallel-group study performed in a single academic center, Imperial College London, of adult patients with moderate to severe seasonal allergic rhinitis (interfering with usual daily activities or sleep). First enrollment was March 2011, last follow-up was February 2015. INTERVENTIONS Thirty-six participants received 2 years of sublingual immunotherapy (daily tablets containing 15 mug of major allergen Phleump 5 and monthly placebo injections), 36 received subcutaneous immunotherapy (monthly injections containing 20 mug of Phleum p 5 and daily placebo tablets) and 34 received matched double-placebo. Nasal allergen challenge was performed before treatment, at 1 and 2 years of treatment, and at 3 years (1 year after treatment discontinuation). MAIN OUTCOMES AND MEASURES Total nasal symptom scores (TNSS; range; 0 [best] to 12 [worst]) were recorded between 0 and 10 hours after challenge. The minimum clinically important difference for change in TNSS within an individual is 1.08. The primary outcome was TNSS comparing sublingual immunotherapy vs placebo at year 3. Subcutaneous immunotherapy was included as a positive control. The study was not powered to compare sublingual immunotherapy with subcutaneous immunotherapy. RESULTS Among 106 randomized participants (mean age, 33.5 years; 34 women [32.1%]), 92 completed the study at 3 years. In the intent-to-treat population, mean TNSS score for the sublingual immunotherapy group was 6.36 (95%CI, 5.76 to 6.96) at pretreatment and 4.73 (95%CI, 3.97 to 5.48) at 3 years, and for the placebo group, the score was 6.06 (95%CI, 5.23 to 6.88) at pretreatment and 4.81 (95%CI, 3.97 to 5.65) at 3 years. The between-group difference (adjusted for baseline) was -0.18 (95%CI, -1.25 to 0.90; [P = .75]). CONCLUSIONS AND RELEVANCE Among patients with moderate to severe seasonal allergic rhinitis, 2 years of sublingual grass pollen immunotherapy was not significantly different from placebo in improving the nasal response to allergen challenge at 3-year follow-up.

Year of Publication
2017

Citation 6.

Title
The epidemiology of invasive meningococcal disease in EU/EEA countries, 2004-2014.

Source
Vaccine. 35 (16) (pp 2034-2041), 2017. Date of Publication: 11 Apr 2017.

Author
Whittaker R.; Dias J.G.; Ramliden M.; Kodmon C.; Economopoulou A.; Beer N.; Pastore Celentano L.;

Abstract
Background Invasive meningococcal disease (IMD) is a major cause of bacterial meningitis and septicaemia although infection by some serogroups may be prevented through vaccination. We aimed to describe the epidemiology of IMD in EU/EEA countries during 2004-2014 to monitor serogroup- and age-specific trends, and compare country trends by the period of meningococcal C

conjugate (MCC) vaccine introduction. Methods We analysed IMD surveillance data by age, gender, serogroup, country and outcome. We estimated the percentage change in annual notification rate (NR), using linear regression analysis of the log of the annual NR. We grouped countries by the year they introduced MCC vaccination into their routine immunisation programmes. Results The overall NR was 0.9/100 000 population, and decreased 6.6% (95%CI: -8.0%;-5.1%) annually. Infants had the highest NR (16.0/100 000), and there were decreasing trends in all age groups <50 years. Serogroup B (SgB) caused 74% of all cases, and the majority of cases in all age groups. There were decreasing trends in SgB and serogroup C (SgC) and an increasing trend in serogroup Y. Countries that introduced MCC vaccination before, and between 2004 and 2014, had decreasing trends in NR of SgC, but not countries without routine MCC vaccination. Conclusions Our findings support evidence that routine MCC vaccination was the driving force behind the decreasing SgC trend. Vaccinating against SgB in the first year of life could help reduce the burden of IMD due to this serogroup. Changing serogroup-specific NR trends highlight the need for high-quality surveillance data to accurately assess the changing epidemiology of IMD, the effectiveness and impact of implemented vaccines, and the need for future vaccines.
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Year of Publication

2017

Citation 7.

Title

2016 Update of the Italian Pediatric Society Guidelines for Management of Fever in Children.

Source

Journal of Pediatrics. 180 (pp 177-183.e1), 2017. Date of Publication: 01 Jan 2017.

Author

Chiappini E.; Venturini E.; Remaschi G.; Principi N.; Longhi R.; Tovo P.-A.; Becherucci P.; Bonsignori F.; Esposito S.; Festini F.; Galli L.; Lucchesi B.; Mugelli A.; Marseglia G.L.; de Martino M.;

Abstract

Objective To review new scientific evidence to update the Italian guidelines for managing fever in children as drafted by the panel of the Italian Pediatric Society. Study design Relevant publications in English and Italian were identified through search of MEDLINE and the Cochrane Database of Systematic Reviews from May 2012 to November 2015. Results Previous recommendations are substantially reaffirmed. Antipyretics should be administered with the purpose to control the child's discomfort. Antipyretics should be administered orally; rectal administration is discouraged except in the setting of vomiting. Combined use of paracetamol and ibuprofen is discouraged, considering risk and benefit. Antipyretics are not recommended preemptively to reduce the incidence of fever and local reactions in children undergoing vaccination, or in attempt to prevent febrile convulsions in children. Ibuprofen and paracetamol are not contraindicated in children who are febrile with asthma, with the exception of known cases of paracetamol- or nonsteroidal anti-inflammatory drug-induced asthma. Conclusions Recent medical literature leads to reaffirmation of previous recommendations for use of antipyretics in children who are febrile.
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Year of Publication

2017

Citation 8.

Title

United Kingdom National Guideline on the Management of the viral hepatitides A, B and C 2015.

Source

International Journal of STD and AIDS. 27 (7) (pp 501-525), 2016. Date of Publication: 2016.

Author
Brook G.; Bhagani S.; Kulasegaram R.; Torkington A.; Mutimer D.; Hodges E.; Hesketh L.; Farnworth S.; Sullivan V.; Gore C.; Devitt E.; Sullivan A.K.;
Year of Publication
2016

Citation 9.
Title
BCSH/BSBMT/UK clinical virology network guideline: Diagnosis and management of common respiratory viral infections in patients undergoing treatment for haematological malignancies or stem cell transplantation.
Source
British Journal of Haematology. 173 (3) (pp 380-393), 2016. Date of Publication: 01 May 2016.
Author
Dignan F.L.; Clark A.; Aitken C.; Gilleece M.; Jayakar V.; Krishnamurthy P.; Pagliuca A.; Potter M.N.; Shaw B.; Skinner R.; Turner A.; Wynn R.F.; Coyle P.;
Abstract
A joint working group established by the Haemato-oncology subgroup of the British Committee for Standards in Haematology, the British Society for Bone Marrow Transplantation and the UK Clinical Virology Network has reviewed the available literature and made recommendations for the diagnosis and management of respiratory viral infections in patients with haematological malignancies or those undergoing haematopoietic stem cell transplantation. This guideline includes recommendations for the diagnosis, prevention and treatment of respiratory viral infections in adults and children. The suggestions and recommendations are primarily intended for physicians practising in the United Kingdom.
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Year of Publication
2016

Citation 10.
Title
Influenza Vaccination in Patients With Chronic Heart Failure: The PARADIGM-HF Trial.
Source
JACC: Heart Failure. 4 (2) (pp 152-158), 2016. Date of Publication: 01 Feb 2016.
Author
Vardeny O.; Claggett B.; Udell J.A.; Packer M.; Zile M.; Rouleau J.; Swedberg K.; Desai A.S.; Lefkowitz M.; Shi V.; McMurray J.J.V.; Solomon S.D.;
Abstract
Objectives: This study sought to examine the prevalence and predictors of influenza vaccination among participants in the PARADIGM-HF (Prospective Comparison of ARNI with ACEI to Determine Impact on Global Mortality and Morbidity in Heart Failure) study and investigate associations between receiving influenza vaccine and cardiovascular death or heart failure hospitalizations, all-cause hospitalizations, and cardiopulmonary or influenza-related hospitalizations.

Background(s): Influenza is associated with an increased risk for cardiovascular events in patients with heart failure.
Method(s): We used data from the PARADIGM-HF trial in which patients with heart failure were randomized to the angiotensin receptor neprilysin inhibitor LCZ696 (sacubitril/valsartan) or enalapril. We assessed predictors of receiving influenza vaccination, and examined the relationship between influenza vaccination and outcomes in a propensity-adjusted model.
Result(s): Of 8,099 study participants, 1,769 (21%) received influenza vaccination. We observed significant regional variation in vaccination rates, with highest rates in the Netherlands

(77.5%), Great Britain (77.2%), and Belgium (67.5%), and lowest rates in Asia (2.6%), with intermediate rates in North America (52.8%). Top predictors of vaccination included enrolling country, white race, implanted defibrillator, older age, lower New York Heart Association functional class, lower heart rate, and a history of diabetes mellitus. Influenza vaccination was associated with a reduced risk for all-cause mortality in propensity-adjusted (hazard ratio: 0.81; 95% confidence interval: 0.67 to 0.97; p = 0.015) models.
Conclusion(s): Influenza vaccination rates varied widely in patients with heart failure with reduced ejection fraction enrolled in the PARADIGM-HF trial, and vaccination was associated with reduced risk for death, although whether this association was causal cannot be determined.
Copyright © 2016 American College of Cardiology Foundation.

Year of Publication

2016

Citation 11.

Title

Does viral Co-Infection influence the severity of acute respiratory infection in children?.

Source

PLoS ONE. 11 (4) (no pagination), 2016. Article Number: e0152481. Date of Publication: April 2016.

Author

Miriam C.-L.; Jethro H.; Jacobo P.-S.; Alberto G.-C.; Nazareth M.-T.; Antonio S.; Jose M.M.-S.; Antonio J.; Irene R.-C.; Edward S.; Colin F.; Federico M.-T.;

Abstract

Background Multiple viruses are often detected in children with respiratory infection but the significance of co-infection in pathogenesis, severity and outcome is unclear. Objectives To correlate the presence of viral co-infection with clinical phenotype in children admitted with acute respiratory infections (ARI). Methods We collected detailed clinical information on severity for children admitted with ARI as part of a Spanish prospective multicenter study (GENDRES network) between 2011-2013. A nested polymerase chain reaction (PCR) approach was used to detect respiratory viruses in respiratory secretions. Findings were compared to an independent cohort collected in the UK. Results 204 children were recruited in the main cohort and 97 in the replication cohort. The number of detected viruses did not correlate with any markers of severity. However, bacterial superinfection was associated with increased severity (OR: 4.356; P-value = 0.005), PICU admission (OR: 3.342; P-value = 0.006), higher clinical score (1.988; P-value = 0.002) respiratory support requirement (OR: 7.484; P-value < 0.001) and longer hospital length of stay (OR: 1.468; P-value < 0.001). In addition, pneumococcal vaccination was found to be a protective factor in terms of degree of respiratory distress (OR: 2.917; P-value = 0.035), PICU admission (OR: 0.301; P-value = 0.011), lower clinical score (-1.499; P-value = 0.021) respiratory support requirement (OR: 0.324; P-value = 0.016) and oxygen necessity (OR: 0.328; P-value = 0.001). All these findings were replicated in the UK cohort. Conclusion The presence of more than one virus in hospitalized children with ARI is very frequent but it does not seem to have a major clinical impact in terms of severity. However bacterial superinfection increases the severity of the disease course. On the contrary, pneumococcal vaccination plays a protective role.
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Year of Publication

2016

Citation 12.

Title
Outbreak of neisseria meningitidis capsular group w among scouts returning from the world Scout Jamboree, Japan, 2015.
Source
Eurosurveillance. 21 (45) (no pagination), 2016. Article Number: 30392. Date of Publication: 10 Nov 2016.
Author
Smith-Palmer A.; Oates K.; Webster D.; Taylor S.; Scott K.J.; Smith G.; Parcell B.; Lindstrand A.; Wallensten A.; Fredlund H.; Widerstrom M.; McMenamin J.;
Abstract
The 23rd World Scout Jamboree was held in Japan from 28 July to 8 August 2015 and was attended by over 33,000 scouts from 162 countries. An outbreak of invasive meningococcal disease capsular group W was investigated among participants, with four confirmed cases identified in Scotland, who were all associated with one particular scout unit, and two confirmed cases in Sweden; molecular testing showed the same strain to be responsible for illness in both countries. The report describes the public health action taken to prevent further cases and the different decisions reached with respect to how wide to extend the offer of chemoprophylaxis in the two countries; in Scotland, chemoprophylaxis was offered to the unit of 40 participants to which the four cases belonged and to other close contacts of cases, while in Sweden chemoprophylaxis was offered to all those returning from the Jamboree. The report also describes the international collaboration and communication required to investigate and manage such multinational outbreaks in a timely manner.
Year of Publication
2016

Citation 13.
Title
Prescribing antibiotics to 'at-risk' children with influenza-like illness in primary care: Qualitative study.
Source
BMJ Open. 6 (6) (no pagination), 2016. Article Number: e011497. Date of Publication: 01 Jun 2016.
Author
Ashdown H.F.; Raisanen U.; Wang K.; Ziebland S.; Harnden A.; Semple M.G.; Mallett S.; Wolstenholme J.; Perera-Salazar R.; Yu L.-M.; Hay A.; Little P.; Moore M.; Butler C.; Carver T.T.;
Abstract
Objectives: National Institute for Health and Care Excellence guidelines recommend immediate antibiotic treatment of respiratory tract infections in 'at-risk' individuals with comorbidities. Observational evidence suggests that influenza particularly predisposes children to bacterial complications. This study investigates general practitioners' (GPs') accounts of factors influencing their decision-making about antibiotic prescribing in the management of at-risk children with influenza-like illness (ILI).
Design(s): Qualitative interview study using a maximum variation sample with thematic analysis through constant comparison.
Setting(s): Semistructured telephone interviews with UK GPs using a case vignette of a child with comorbidities presenting with ILI.
Participant(s): There were 41 GPs (41.5% men; 40 from England, 1 from Northern Ireland) with a range of characteristics including length of time in practice, paediatrics experience, practice setting and deprivation.
Result(s): There was considerable uncertainty and variation in the way GPs responded to the case and difference of opinion about how long-term comorbidities should affect their antibiotic prescribing pattern. Factors influencing their decision included the child's case history and clinical examination; the GP's view of the parent's ability to self-manage; the GP's own confidence and experiences of managing sick children and assessment of individual versus abstract

risk. GPs rarely mentioned potential influenza infection or asked about immunisation status. All said that they would want to see the child; views about delayed prescribing varied in relation to local health service provision including options for follow-up and paediatric services.
Conclusion(s): The study demonstrates diagnostic uncertainty and wide variation in GP decision-making about prescribing antibiotics to children with comorbidity. Future guidelines might encourage consideration of a specific diagnosis such as influenza, and risk assessment tools could be developed to allow clinicians to quantify the levels of risk associated with different types of comorbidity. However, the wide range of clinical and non-clinical factors involved in decisionmaking during these consultations should also be considered in future guidelines.
Year of Publication
2016