

## GLOBAL PROBLEMS

**P2-345 AMNIOTIC FLUID CHEMOKINES LEVELS AND AUTISM SPECTRUM DISORDERS, A STUDY UTILISING A DANISH HISTORIC BIRTH COHORT**

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**Introduction** With escalating prevalence over the past 3 decades and increasing cost of care, Autism Spectrum Disorders (ASD) represent a major public health concern. Despite the ongoing extensive research, no specific pathophysiological pathway has been universally accepted. However, converging evidence sheds the light on the important role of immunologic dysfunction in ASD.

**Objectives** To our knowledge, this is the first study to analyse levels of selected chemokines (monocyte chemoattractant protein [MCP]-1, macrophage inflammatory protein [MIP]-1 $\alpha$  and regulated upon activation normal T-cell expressed and secreted [RANTES]) in maternal amniotic fluid of individuals diagnosed with ASD later in life and controls.

**Methods** We adopted a case-control study design utilising Danish nation-wide health registers and a historic birth cohort (HBC) kept and maintained at Statens Serum Institute in Copenhagen. 414 Cases and 820 controls were retrieved from the HBC. Chemokines measurements were performed using Luminex xMAP technology. Case-control differences in biomarker levels were assessed as continuous measures (Tobit Censored regression models) or dichotomised at below the 10th percentile or above the 90th percentile cutpoints derived from control biomarker distributions (logistic regression).

**Results and Conclusion** We found no significant overall difference in the pattern of the analysed amniotic fluid chemokines in ASD cases compared to controls. However, females tend to show a different chemokine pattern compared to males, especially for MIP-1 $\alpha$ , but with no statistical significance (Elevated 90th percentile OR=2.24 [95% CI 0.90 to 5.59]). Larger-scale studies with more sensitive assays are needed to investigate the role of chemokines and other cytokines in ASD.

**P2-346 THE RISK OF VENOUS THROMBOEMBOLISM IN AND AROUND PREGNANCY: A POPULATION-BASED COHORT STUDY**

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**Background** Knowledge of the absolute and RR of Venous Thromboembolism (VTE) in and around pregnancy is crucial in identifying when to commence and cease thromboprophylaxis in women who would benefit most from such intervention.

**Methods** We used electronic general practice data with details of all pregnancies in prospective primary care records of women aged 15–45 years old between 1987 and 2004. Women experiencing their first VTE event were identified, and the risks of VTE during antepartum and postpartum periods were compared with those outside pregnancy using a Poisson regression model adjusted for age and calendar period.

**Findings** Among 972 683 women in our cohort there were 207 327 live birth pregnancies. The overall risk of VTE compared with the risk outside pregnancy was much higher in the postpartum (HR=11.9 95% CI 9.8 to 14.5; absolute risk 228/100 000 person-years) than antepartum (HR=2.9, 2.3 to 3.7; 55/100 000 person-years). The third trimester conveyed greater risk (HR=5.3, 4.0 to 7.0) than the first (HR=1.3, 0.7 to 2.4) and second (HR=1.7, 1.0 to 2.8) trimesters. The increase in postpartum risk was predominantly in the first 6 weeks postpartum (HR=22.3), with only a small increased risk in the second 6 weeks postpartum (HR=1.8). Findings were independent of age and calendar period.

**Interpretation** Women are at highest risk of VTE in the third trimester of pregnancy and in the first 6 weeks postpartum. Beyond the normal age-related increase risk of VTE for all women, pregnancy does not augment further the increased RR of VTE related to age. These findings will inform the revised Royal College of Obstetricians and Gynaecologists guidelines on VTE prophylaxis.

**P2-347 10 YEARS OF POLIO/AFP SURVEILLANCE IN LEBANON: 2000–2009**

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**Background** Ever since the 1988 poliomyelitis eradication global initiative, cases have been drastically decreasing; however, four countries remain polio reservoir sources for virus exportation. In Lebanon, the last two indigenous cases were reported in 1994. Acute flaccid paralysis (AFP) surveillance was adopted in Lebanon in 1998 to detect poliomyelitis cases, using syndromic approach.

**Objective** The objective of AFP surveillance is to early identify polio cases and achieve rapid response.

**Methods** According to Lebanese law, physicians immediately report any suspected polio case, using WHO case definition. Detection is enhanced by weekly hospital zero-reporting and active surveillance. Once case is reported, investigation is launched with data gathering and stool collection within 14 days of paralysis onset. Virological culture is performed at WHO accredited laboratory. Patients are reviewed by treating physicians or National Expert Group at day 60, assessing residual weakness. Accordingly, patients are classified as polio confirmed, compatible or discarded. Surveillance findings are posted at MOPH website.

**Results** Between 2000 and 2009, 154 patients were reported, on average 15 annually. No silent geographic areas were identified. 63% were males and 36% were under 5 years. Annual national AFP rate ranged from 0.79 to 2.34/100 000 under 15 y, with 72% specimen adequacy. Final diagnosis of most patients (75%) was attributed to Guillain Barre. One imported polio patient was confirmed in 2003 and another was classified as compatible in 2008.

**Conclusion** Enhancing AFP surveillance is of national priority because Lebanon is highly susceptible to polio importation due to ongoing Lebanese diaspora and foreign workers turnover.

**P2-348 AVOIDABLE MORTALITY IN ELDERLY PEOPLE: USING THE BRAZILIAN AVOIDABLE CAUSES OF DEATH CLASSIFICATION IN THREE BRAZILIAN CITIES (2003–2007)**

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Population ageing is observed throughout the world, especially in developing countries where this growth is even faster. Ageing leads