THU0700

PERINATAL EXPOSURE TO DISEASE MODIFYING ANTIRHEUMATIC DRUGS IN WOMEN WITH INFLAMMATORY ARTHRITIS AND THE RISK OF SMALL-FOR-GESTATIONAL-AGE NEWBORNS: A POPULATION-BASED COHORT STUDY

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Background: Currently there exists limited data on pregnancy outcomes among women with inflammatory arthritis (IA) using conventional synthetic DMARDs (csDMARDs), and the risk of small-for-gestational-age (SGA) births.

Objectives: To investigate the association between csDMARD use before and during pregnancy and SGA births.

Methods: We linked population-based health data in British Columbia, Canada over a 10 year study period (01/01/2002 – 12/31/2012) on all physician visits, hospital admissions, and dispensed medications with a perinatal registry containing valid information on date of conception. We created a pregnancy cohort of women with IA using a case definition of 2 outpatient physician ICD9 codes ≥ 2 months and ≤ 2 years apart for rheumatoid arthritis, systemic autoimmune rheumatic diseases, ankylosing spondylitis, juvenile idiopathic arthritis, and psoriatic arthritis. We categorised csDMARDs according to accepted safety profiles - antimalarials, cyclosporine-A, gold, and sulfasalazine (Group 1); and methotrexate, leflunomide, azathioprine, cyclophosphamide, chlorambucil, penicillamine, mycophenolate mofetil, and minocycline (Group 2). We determined exposure as binary use (yes/no) during the 90 days preconception; and during pregnancy from date of conception until date of delivery. The SGA outcome was defined as < 10 th percentile of sex- and gestational-age specific weights for singleton births or with ICD9/10 codes. We used logistic regression models fitted with generalised estimating equations and adjusted for baseline covariates.

Results: There were 611 pregnancies in 513 women (32 ± 5 years), and 5638 pregnancies in 4077 women (31 ± 5 years) in the csDMARDs exposed and unexposed groups, respectively. We identified 13%, 18%, and 42% of newborns as SGA in unexposed pregnancies and exposed to Group 1 and 2 csDMARDs, respectively. The adjusted odds ratio (OR) for exposure to Group 1 csDMARDs preconception and during pregnancy and risk of SGA births was 1.49 (95%CI 1.12, 1.97) (table 1). The risk of SGA births was higher in those exposed to Group 2 csDMARDs (OR 1.78, 95% CI 1.14, 2.78). With respect to specific csDMARDs, we observed an OR of 1.25 (95% CI, 0.41, 3.82) for methotrexate.

Abstract THU0700 – Table 1. Association of csDMARD exposure preconception and/or during pregnancy and risk of SGA births

Models*	Exposure period	OR	95% Confidence Interval
Model 1	Preconception only vs. unexposed	0.79	0.42–1.50
Group 1	During pregnancy only vs. unexposed	1.57	0.83–2.99
csDMARDs	Preconception AND during pregnancy vs. unexposed	1.49	1.12–1.97
Model 2	Preconception only vs. unexposed	0.85	0.42–1.72
Group 2	During pregnancy only vs. unexposed	2.65	0.95–7.37
csDMARDs	Preconception AND during pregnancy vs. unexposed	1.78	1.14–2.78
Model 3	Preconception only vs. unexposed	0.77	0.31–1.88
Methotrexate	During pregnancy only vs. unexposed	2.24	0.48–10.48
	Preconception AND during pregnancy vs. unexposed	1.25	0.41–3.82

*All models were adjusted for baseline covariates including maternal characteristics, obstetrical history, comorbidities, and medication use before/during pregnancy.

Conclusions: Our findings suggesting a risk of SGA births with exposure to csDMARDs preconception and during pregnancy have implications for informing women with inflammatory arthritis who are pregnant or planning to become pregnant.

Disclosure of Interest: None declared

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THU0701

UPDATED INCIDENCE AND COSTS OF HIP FRACTURES IN ELDERLY ITALIAN POPULATION

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Background: It had already been evaluated the hospitalisation rate of femoral neck fractures in the elderly Italian population over ten years, showing that incidence of hip fractures in Italy are continuously increasing, although women aged 65–74 years old started showing a decreasing trend.

Objectives: To update our previous researches about the burden of hip fractures in elderly Italian population.

Methods: We analysed national hospitalizations records from 2007 to 2014 to compute age- and sex-specific standardised rates.

Results: 7 41 633 hospitalizations were observed in people ≥ 65 (women: 568,203; men: 173,430), with an overall increase of 5.50% over the 8 year period (females: +3.36; males: +12.9%). About 43.75% of total hip fractures were suffered by patients aged ≥ 85 years old. Women aged ≥ 85 accounted for 34.49% ($n=255,763$) of total fractures. The incidence rate per 10 000 inhabitants in people aged 65–74 decreased from 28.65 to 25.31 in women (-13.02%) and from 13.41 to 11.65 in men (-13.12%). Incidence per 10 000 in people 75–84 decreased from 121.6 to 105.2 in women (-13.49%) and from 55.8 to 47.5 in men (-14.87%). Paradoxically, also in people aged ≥ 85 , the incidence per 10 000 declined from 300.99 to 268.72 in women (-10.72%) and from 174.59 to 171.17 in men (-1.96%) because the number of subjects aged ≥ 85 is growing faster than the number of fractures occurring in this latter age group. Direct hospitalisation costs and rehabilitation costs increased from 433 to 457 million Euros and from 478 to 504 million Euros over the 8 year period, respectively. Overall costs of hip fractures in people aged ≥ 65 years old raised from 911 to 961 million Euros from 2007 to 2014.

Abstract THU0701 – Table 1

Year	2007	2008	2009	2010	2011	2012	2013	2014
Hospitalizations due to hip fractures (femoral neck) (n)	89,601	92,532	93,169	92,549	91,733	93,408	94,116	94,525
Overall hospitalizations direct costs (€)	433,230,977	447,402,694	450,482,661	447,484,891	443,539,438	451,638,253	455,061,513	457,039,074
Overall rehabilitation costs (€)	478,324,581	493,971,385	497,371,936	494,062,138	489,706,016	498,647,810	502,427,386	504,610,785
Overall direct costs estimation (€)	911,555,558	941,374,079	947,854,597	941,547,028	933,245,454	950,286,063	957,488,899	961,649,859

Conclusions: The number of hip fractures and related hospitalizations costs in Italian elderly population is still increasing due to the fractures occurring in people ≥ 85 years old, although incidence rates are decreasing in all the age groups.

REFERENCE:

- 1] Ten years of hip fractures in Italy: For the first time a decreasing trend in elderly women. Piscitelli P, Feola M, Rao C, Celi M, Gasbarra E, Neglia C, Quarta G, Liuni FM, Parri S, Iolascon G, Brandi ML, D'Amico A, Tarantino U. World J Orthop 2014 Jul 18;5(3):386–91. doi:10.5312/wjo.v5.i3.386

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THU0702

SECULAR TRENDS OF HIP FRACTURES IN FRANCE BETWEEN 2002 AND 2013: IMPACT OF THE REFERENCE VALUES

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Background: Hip fractures are a societal burden because of their high related morbidity and mortality, and the cost they generate. With the ageing of the population, worries grow about an increase of the incidence and incidence rate of hip fracture in the next years. Numerous studies have shown an increase in the incidence whilst a decrease in the incidence rates of hip fracture in the majority of Europe countries and North America. These data come from heterogeneous studies regarding the reference population used, and thus their interpretations remain controversial.

Objectives: The aim of our study was to assess the impact of the choice of the reference population in the interpretation of incidence rates data, using country-based data of French population.

Methods: We used data related to the hospitalizations for hip fracture in France between 2002 and 2013 in patients over 59 years, extracted from the French National Hospital Database. Data were based on the whole French population and were classified by sex and age (60–74, 75–84, over 84 years, over 59 years). We first calculated the crude incidence rates of hip fracture by dividing the number of hospitalizations for hip fracture by the corresponding populations. To assess the impact of the choice of the reference population, we then calculated the crude and adjusted incidence rates using direct standardisation on age with three different reference populations (2002, 2013, mean population of 2002–2013).

Results: Between 2002 and 2013 in France, the incidence of hip fracture raised of 4.8% in women (from 49 287 to 51,661) and 21.8% in men (from 12 716 to 15,482), aged 59 years and over. In the meantime, French population over 59 years increased more with a rise of 21.3% in women and 28.7% in men, which explained a decrease in the crude incidence rates of 13.6% in women and 5.4% in men. However, this decrease was even more obvious after direct standardisation