Conclusion Sedentary work defined by a wide-range group of occupations, is not a risk factor for VTE. Whether certain occupations with particularly high exposure to immobilised sitting positions are associated with thromboembolic events is not addressed.

Oral Presentation

Other

0172 "TO BE PRESENTED IN AN ACCEPTED MINI-SYMPOSIUM" ASSOCIATION BETWEEN OCCUPATIONAL LIFTING AND RHEGMATOGENOUS RETINAL DETACHMENT IN A NATIONAL COHORT OF SWEDISH MEN

¹Andrea Farioli*, ²David Kriebel, ¹Stefano Mattioli, ^{3,4}Katarina Kjellberg, ^{3,5}Tomas Hemmingsson. ¹Department of Medical and Surgical Sciences (DIMEC), Bologna, Italy; ²Department of Public Health, University of Massachusetts Lowell, Lowell, USA; ³Institute of Environmental Medicine, Karolinska Institutet, Stockholm, Sweden; ⁴Centre for Occupational and Environmental Medicine, Stockholm County Council, Stockholm, Sweden; ⁵Centre for Social Research on Alcohol and Drugs, Stockholm University, Stockholm, Sweden

10.1136/oemed-2017-104636.139

Objectives As the evidence on the possible association between lifting and retinal detachment (RD) is limited and controversial, we analysed a large population-based cohort to investigate the risk of RD arising from occupational lifting.

Methods We assessed the incidence of surgically treated RD occurring between 1991 and 2009 in a national cohort of 49,321 Swedish men conscripted for military service in 1969–1970. We applied a job exposure matrix to occupational data from the 1990 census to estimate the frequency of heavy lifting (>20–25 kg) at the workplace. We fitted Poisson regression models including lifting, myopia, income, and education level to estimate incidence rate ratios (IRR) and 95% confidence intervals of RRD.

Results We analysed 217 RD cases that occurred in 7 80 166 person-years. Estimates adjusted by myopia and socioeconomic factors support the hypothesis that the risk of RD increases among subjects lifting heavy weights at least twice per week, compared to workers not performing lifting (IRR 2.38, 95% CI 1.15–4.93, *p* for trend across lifting categories 0.014). Myopia was a strong negative confounder of the lifting - RD association. While RD was rare in the entire cohort (0.28 cases per 1000 person-years), the rate peaked at 7.9 per 1000 person-years among workers frequently lifting heavy loads, aged between 50 and 59 years, and affected by severe myopia.

Conclusions Our study provides evidence that performing heavy occupational lifting increases the risk of RD, while myopia and socioeconomic factors may be important negative confounders of this association.

Poster Presentation

Cancer

0173 RADIATION-INDUCED PERITONEAL MESOTHELIOMA AFTER EXTERNAL BEAM RADIOTHERAPY FOR PROSTATE ADENOCARCINOMA: A LONGITUDINAL ANALYSIS OF SEER REGISTRIES

¹Andrea Farioli*, ²Francesca Zanardi, ¹Emanuele Rizzello, ³Giovanna Spatari, ⁴Alessio Giuseppe Morganti, ¹Francesco Saverio Violante. ¹Department of Medical and Surgical Sciences (DIMEC), Bologna University, Bologna, Italy; ²Department of Public Health Sciences and Paediatrics, Turin University, Turin, Italy; ³Department of Biomedical and Dental Sciences and Morphofunctional Imaging, Messina University, Messina, Italy; ⁴Department of Experimental, Diagnostic and Specialty Medicine, University of Bologna, Bologna, Italy

10.1136/oemed-2017-104636.140

Objective To investigate the association between external beam radiotherapy (EBRT) for prostate adenocarcinoma (PA) and malignant peritoneal mesothelioma (MPM) using data from the US Surveillance, Epidemiology and End Results (SEER) program.

Methods We identified PA cases diagnosed in 1973–2013 among patients aged ≥45 years. The follow-up started one year after the primary diagnosis (to exclude synchronous cancers and limit surveillance bias) and ended at the diagnosis of MPM, other malignancies, death, or at the study end (12/31/2013). We estimated hazard ratios (HR) and 95% confidence intervals (95% CI) of MPM for EBRT, compared to no radiotherapy, by fitting Cox models incorporating inverse probability weights to account for age at diagnosis, race, year of diagnosis, primary cancer surgery, SEER register, and county's mesothelioma relative risk (proxy for individual asbestos exposure).

Results We observed 34 MPM cases occurring in 4,755,045 person-years (rate of 0.7 per 1 00 000 person-years, 95% CI 0.5–1.0). The risk of MPM was higher among EBRT patients (HR 2.1, 95% CI 0.9–4.8) and increased steadily with increasing latency period (1–4 years, HR 1.3, 95% CI 0.4–4.6; 5–9 years, HR 1.9, 95% CI 0.5–7.7; ≥10 years, HR 4.9, 95% CI 0.9–28). However, only 8 MPM were observed for latency periods ≥10 years.

Conclusions Our study supports the hypothesis that EBRT for PA is associated with MPM. However, the incidence of MPM in our study population was very low; future studies should focus on high-risk populations (e.g. former asbestos workers) to evaluate the clinical significance of the observed association.

Oral Presentation

Respiratory

0174 MORTALITY DUE TO ASBESTOSIS IN A COHORT OF FORMER ASBESTOS TEXTILE WORKERS

¹Andrea Farioli*, ¹Francesco Saverio Violante, ²Carlo La Vecchia, ³Eva Negri, ²Claudio Pelucchi, ⁴Giovanna Spatarì, ⁵Paolo Boffetta, ⁶Enrico Pira. ¹Department of Medical and Surgical Sciences (DIMEC), Bologna University, Bologna, Italy; ²Department of Clinical Sciences and Community Health, Milan University, Milan, Italy; ³Department of Biomedical and Clinical Sciences, Milan University, Milan, Italy; ⁴Department of Biomedical and Dental Sciences and Morphofunctional Imaging, Messina University, Messina, Italy; ⁵Tisch Cancer Institute, Icahn School of Medicine at Mount Sinai, New York, USA; ⁶Department of Public Health Sciences and Paediatrics, Turin University, Turin, Italy

10.1136/oemed-2017-104636.141

Background Knowledge on the role of the temporal pattern of exposure to asbestos in determining mortality from asbestosis is limited. We aim at investigating how the risk of death due to asbestosis changes according to the duration of employment and the time since the last employment (TSLE).

Methods An historical cohort of workers from a former asbestos textile factory (active between 1946 and 84) was followed up until November 2013. For each subjects, we collected information on duration of the employment, TSLE, age and year of first employment, and sex. We estimated hazard ratios (HR) and 95% confidence intervals (CI) of death from asbestosis by fitting multivariable Cox regression models with age specified as the main temporal axis.

Results We identified 51 deaths from asbestosis that occurred among 1823 workers (incidence rate of 74 cases per 1 00 000 person-years). The risk of death from asbestosis increased with increasing exposure duration (HR 3.0 [95%CI 1.3–7.6] for duration of employment ≥ 15 years compared to duration < 5 years) and declined with TSLE (HR 0.3 [95%CI 0.1–0.9] for TSLE ≥ 25 compared to TSLE < 5 years). We observed a strong decline of mortality due to asbestosis among workers firstly employed after 1968.

Conclusions Information on the temporal pattern of exposure to asbestos is fundamental to estimate the individual risk of asbestosis. On the opposite of what overserved in ecological studies, the risk of death due to asbestosis declines steadily after cessation of exposure to asbestos.

Oral Presentation

Occupational Medicine (SCOM/Modernet)

0175 DIFFERENT APPROACHES FOR EARLY RECOGNITION AND PREVENTION OF NEW AND EMERGING WORK-RELATED DISEASES

¹Jelena Bakusic, ²Annet Lenderink, ^{1,3}Charlotte Lambregts, ^{1,3}Sofie Vandenbroeck, ⁴Jos Verbeek, ⁵Stefania Curti, ⁵Stefano Mattioli, ^{1,3}Lode Godderis*. ¹Department of Public Health and Primary Care, KU Leuven, Leuven, Belgium; ²Netherlands Centre for Occupational Diseases, Coronel Institute on Work and Health, AMC/University of Amsterdam, Amsterdam, The Netherlands; ³IDEWE, External Service for Prevention and Protection at Work, Heverlee, Belgium; ⁴Finnish Institute of Occupational Health, Kuopio, Finland; ⁵Department of Medical and Surgical Sciences, University of Bologna, Bologna, Italy

10.1136/oemed-2017-104636.142

Rapid changes in working conditions constantly give rise to new occupational health risks and work-related diseases (WRDs). Monitoring these new WRDs is essential from the aspects of early recognition and prevention. In addition, it requires a comprehensive approach, using several complementary methods. One of these methods are early warning systems designed to collect information on health effects in order to trigger interventions and prevention. These systems differ in characteristics, their ability to capture new WRDs and their link with prevention. Therefore, the aim of this study is to identify sentinel and alert systems for detecting new and emerging WRDs, describe their main characteristics, and set up a basic typology. In the first phase, we conducted an extensive scientific and grey literature review and we identified 75 surveillance systems covering 26 different countries. We set up a basic typology of these systems dividing them into four main groups: compensation-based systems (21), non-compensation related comprehensive systems (38), sentinel systems (12) and public health surveillance systems aimed at workers and non-workers (7). These systems further differed in type of WRDs, coverage, data collection, evaluation of work-relatedness; follow up of new/emerging risks, link with prevention etc. In the second phase, we chose a representative selection of 12 good practise examples to be described in-depth. Through a desk research and interviews with stakeholders, we gained additional insight into drivers and obstacles regarding these systems and usage of collected data for identification of WRDs, prevention and policy recommendations.

Oral Presentation

Cancer

0176 SINONASAL CANCER FOLLOWING OCCUPATIONAL STYRENE EXPOSURE: A NEW SIGNAL OF HUMAN CARCINOGENESIS?

^{1,2}Mette Schou Nissen*, ¹Zara Ann Stokholm, ¹Mette Skovgaard Christensen, ^{3,4}Vivi Schlünssen, ¹Jesper Medom Vestergaard, ¹Inge Brosbøl Iversen, ¹Henrik Albert Kolstad. ¹Department of Occupational Medicine, Danish Ramazzini Centre, Aarhus University Hospital, Aarhus, Denmark; ²Centre for Integrated Register-based Research, CIRRAU, Aarhus University, Aarhus, Denmark; ³Department of Public Health, Danish Ramazzini Centre, Aarhus University, Aarhus, Denmark; ⁴National Research Centre for the Working Environment, Copenhagen, Denmark

10.1136/oemed-2017-104636.143

Objective We recently suggested an increased risk of sinonasal cancer following occupational styrene exposure. The objective of the current study is to explore this finding further by including information on quantitative measures of styrene exposure and histological information on sinonasal cancer subcategories.

Methods We followed 73 092 workers employed in 456 small and medium sized Danish reinforced plastics companies from 1968 to 2011. Incident cases of sinonasal cancer were identified by linkage with the national Danish Cancer Registry. We modelled cumulative styrene exposure level from historical styrene measurements, company information, and survey data and estimated rate ratios (RR) of overall sinonasal cancer and histological subcategories. Due to few cases, these analyses were performed with no adjustment. To account for potential confounding from age, gender and employment in wood