MENINGITIS, SEPSIS AND ENDOCARDITIS AMONG WORKERS OCCUPATIONALLY EXPOSED TO PIGS

Rolf Petersen,¹ Harald Hannerz,² Finn Tüchsen,² John Egerton³ ¹Slagelse Hospital, Slagelse, Denmark; ²National Research Centre for the Working Environment, Copenhagen, Denmark; ³University of Sydney, Sydney, Australia

10.1136/oemed-2011-100382.117

Objectives Workers exposed to pigs can develop meningitis, sepsis or endocarditis due to infection with Streptococcus suis transmitted from pigs to man. The aim of our study was to estimate the risk of these diseases in workers exposed to pigs.

Methods We used the Occupational Hospital Register (OHR) which holds information about occupation and hospital treatments for all adults in Denmark. A dynamic population of male workers exposed to pigs was identified every year from 1995 to 2006 by occupational and industrial group. First hospital treatment or death in the following year due to meningitis, sepsis or endocarditis was identified by ICD10-codes from the OHR. By comparison with all other economically active men in Denmark, the standardised incidence ratio (SIR) was calculated for these diseases.

Results Among those exposed we observed 32 cases of meningitis, sepsis and endocarditis during 140 118 person years. In the reference group we observed 2680 cases during 15 209 394 person years. The SIR of the exposed group was 1.35 (95% CI: 0.95 to 1.92). Among the 32 cases 7 cases of meningitis and sepsis were specified as caused by infection with streptococci. The SIR for these seven cases was 2.4 (95% CI. 1.1 to 5.0).

Conclusions Our study did not find that workers exposed to pigs had an overall increased risk of developing meningitis, sepsis or endocarditis.