

Descriptive epidemiology of malignant mesothelioma

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KEY WORDS

Epidemiology; mesothelioma; asbestos; review

SUMMARY

Background: *Malignant mesothelioma (MM) is a rare cancer associated with exposure to asbestos, whose occurrence is increasing in industrialized countries.* **Objectives:** *Describe and discuss: determinant factors, natural history, epidemic pattern, burden of MM to society at large, where interventions should be directed to change MM occurrence, gaps in knowledge.* **Methods:** *Review of the literature. Description of MM epidemiological features, with emphasis on risk, prognosis, control measures.* **Results:** *MM may be associated with low level asbestos exposure. Natural fibres other than asbestos possess the same carcinogenic potency. The estimated mean induction period is 25 years, and can be as long as 60 or more years. Survival is poor; current rates of MM in industrialized countries mirror past use of asbestos. In the USA, MM incidence increased steeply from the 1970's, peaked in 2000-2004, then levelled off and is expected to return to background levels by 2055. In the same period, the time-pattern for females was constant. Questions remain unanswered about the contribution of environmental asbestos exposure to MM occurrence. A gender effect has been described. The role of genetic and familial susceptibility is suggested by studies in Turkey. Sv40 has been proposed as co-factor in the asbestos-MM association. Controversy about the different hazards of different asbestos forms is still strong.* **Conclusions:** *World production of asbestos has been declining dramatically in recent years, however increases have occurred in Asia. The decrease in asbestos use and a ban in several industrialized countries have proved effective in reducing the societal burden of MM.*
