

La ricerca clinica nel campo delle malattie professionali (aspetti pneumologici)

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KEY WORDS

Occupational lung disorders; bronchoalveolar lavage; dose-response

SUMMARY

«Clinical research in work-related diseases (pneumological aspects)». *In the second half of the seventies, at the same time as the control of silicosis was achieved thanks to pathogenetic and preventive developments, the major efforts of the Clinica del Lavoro in the pneumological field were focused on studying dose-response relationship in asbestos-exposed subjects. Thus for the first time biological indicators (and not radiological ones) were mentioned for asbestos diseases. Bronchoalveolar lavage (BAL) allowed to compare an internal dose indicator (number of bodies/ml) and schlerogenous effect indicators (dose-response). Our experience over nearly 20 years for exposure assessment in asbestos-related diseases, based on over 500 cases has produced the following results: parenchymial asbestosis is dose-dependent while pleural plaques are dose-independent; epidemiologic data on existence of asbestos resistant subjects were confirmed; asbestos bodies proved to persist in alveolar cavities for several decades. At present, with the ban of asbestos and the increase in forensic medicine cases regarding past asbestos exposures, our Department demonstrated the importance of asbestos body counting in BAL as an objective indicator of asbestos exposure. Besides the asbestos issue, two less frequent work-related diseases were studied and in this regard bronchoalveolar lavage proved to be a substantial diagnostic tool, sometimes even decisive: these were hard metal disease and hypersensitive pneumonitis. In subjects exposed to hard metals, our experience showed the presence of a large lymphocytic alveolitis with CD4+/CD8+ reverse ratio for bronchial asthma and macrophagic-eosinophylic alveolitis characterized by several "bizarre" giant cells in the case of interstitial disease. In extrinsic allergic alveolitis, we noted the presence of a large lymphocytic alveolitis mostly with CD4+/CD8+ reverse ratio, persisting also during clinical remission of the disease.*