

Modificazioni istopatologiche cutanee in lavoratori addetti alla movimentazione di prodotti petroliferi

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SUMMARY

«Histopathological cutaneous alterations in workers exposed to petroleum derivatives». Petroleum and its derivatives are a complex mixture of many constituents in varying proportions, such as polycyclic aromatic hydrocarbons, alcohols, ethers and additives. It is well established that petroleum derivatives are absorbed through the skin but exposure has not been quantified. Manifestations of cutaneous exposure vary from squamous cell carcinoma to irritative contact dermatitis such as occurs in the workplace. The aim of the investigation was to evaluate cutaneous histomorphological alterations in a group of 10 healthy workers occupationally exposed to repeated and low amounts of gasoline for a prolonged period. Histological examination and immunocytochemical techniques were performed after taking punch biopsies. The results showed the presence of perivascular lympho-plasma cell infiltration and leucocyte cells scattered in the dermal layer. A mild increase in epidermal Langerhans cells was also observed while the detection of the Ki-67 antigen in keratinocytes gave a normal appearance. In conclusion, the overall histomorphological and immunological features was not specific, but resembled skin reactions due to several irritative agents. Such skin alterations can lead to contact dermatitis.

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