Occupational asthma in Korean electronics workers caused by colophony fumes: prevalence and preventive measures

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-Abstract-

Electronic soldering workers who are exposed to colophony fumes contained in soldering fluxes can develop occupational asthma. It is known that the prevalence of colophony-induced occupational asthma ranges from 4 % in low-exposure populations to 20 % in more heavily exposed worker groups. But as there has been no report about colophony-induced

occupational asthma in Korea, 78 electronic workers were investigated to estimate the prevalence of colophony-induced occupational asthma in Korea.

The results were as follows :

- By history, 3 workers complained asthmatic symptoms, and two of them were related to work.
- The positivity of skin prick test with common inhalant allergens was
 42 % of study populations, but only one worker who did not complain asthmatic symptoms was sensitized to colophony extract.
- None of them showed bronchial hyperresponsiveness to methacholine.

In conclusion, because soldering process in electronic factories are automatically processed and electronic workers are exposed to a little colophony fume, we couldn't find any case of colophony-induced occupational asthma in workers of electronic factories in Korea.