MECHANISMS OF ACTION OF SOME AIR POLLUTANTS ON THE AIRWAYS

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SUMMARY

Common air pollutants (O3, SO2) exert their deleterious effects in several ways, mostly on the respiratory functions. Ozone causes formation of peroxides and aldehydes with subsequent release of inflammatory lipids and cytokines. Changes in the activity of neutral endopeptidase and release of neuropeptides may occur. As a result, bronchial hyperreactivity can be detected. In the mechanisms of the disturbances due to sulfur dioxide, cholinergic mechanisms and release of neuropeptides may be involved.

Key words: ozone, sulfur dioxide, neuropeptides, arachidonates, bronchial hyperreactivity

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