

## LETTER TO EDITOR

# Autoimmune hepatitis and odour of a fish food proteins

### Dear Sir:

Recently we presented a case of 15-year-old boy with classic (type 1) autoimmune hepatitis presumably caused by a long-term exposure to the strong odour of food fed to a large number of tropical fish which the boy kept in tanks in his bedroom<sup>1</sup>.

Since then we found several publications being in concert with our reasoning presented in this paper<sup>2-9</sup>. All these reports confirm that tropical fishes are not suitable pets for allergic person<sup>2</sup> because some ingredients of pet-fish food are known triggers of type I and type III allergy which may induce "aquarium" allergy. For example, bronchial asthma may be caused by polyvalent sensitization to various components in fish food, such as dried daphnia<sup>3-5</sup>. Pet-fish food lung - a new form of extrinsic allergic alveolitis have also been reported<sup>6</sup>. In this female patient, bronchioloalveolar lavage yielded a highly active lymphocytic alveolitis with a CD4<sup>+</sup>/CD8<sup>+</sup> ratio of 0.8, and serum precipitins directed against two commercially available pet-fish food were detected by counter-immunoelectrophoresis<sup>6</sup>. Allergic reactions associated with inhalation of fish odours or fumes are IgE-mediated<sup>7</sup>, and IgE antibodies induced by aeroallergens recognize structurally similar components in certain foods even from taxonomically unrelated plants<sup>8</sup>. Recently, it was suggested that there are likely to be organ-specific disease susceptibility genes, which together with general atopy genes target the allergic response to specific mucosal tissue<sup>9</sup>.

All these literature data may support our suggestion that odour of fish food proteins may be respon-

sible for triggering autoimmune hepatitis in our patient exposed for several months to sharp odour of fish food proteins.

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