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MATTERS ARISING

Localised autonomic failure due to botulinum toxin injection

I read with great interest Mann's report of a patient receiving botulinum toxin injections for spasmodic torticollis who developed sialoencea and swelling of the parotid glands after each set of injections.1 Local diffusion of the toxin and paralysis of the smooth muscle of the ducts was proposed as a possible underlying mechanism.1

The inhibitory action of botulinum toxin is not confined to the neuromuscular junction. All the autonomic cholinergic fibres including the major secretomotor fibres to salivary glands are similarly blocked. Local diffusion and "chemodenervation" of the parotid glands leading to reduction of salivary flow and the development of chronic recurrent parotitis seems to be a more likely explanation for the patient's symptoms. Dickson and Shevky in 1923 showed that tympanic nerve-induced salivary flow was diminished in about 93% of patients.3 Dry mouth has also been reported in some 30% of patients after cervical injections for spasmodic torticollis.1 Paradoxically, excessive salivation has long been known to occur in botulism.4 A similar paradoxical effect on lacrimal glands producing watering of the eyes has been reported in patients receiving periorbital injections for blepharospasm or hemifacial spasm.2 This paradoxical effect of the toxin on the "neuroglandular junction" remains unexplained. Increased saliva production may partly be responsible for parotid swelling after botulinum toxin injections in the patient reported.

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Immunoglobulin treatment in human and experimental epilepsy

The paper of van Engelen et al1 includes some positive effects of intravenous immunoglobulin (IVIg) in the treatment of refractory epilepsy. No reference about our experience in that field is mentioned, however. In the medical literature reviewed by van Engelen et al, they mention a patient with "oral seizures" who improved on IVIg.2 This paradoxical effect of the toxin on the "neuroglandular junction" remains unexplained. Increased saliva production may partly be responsible for parotid swelling after botulinum toxin injections in the patient reported.

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