Acquired inhibitor to factor VIII causing upper-airway obstruction

Bleeding caused by the acquired production of inhibitors to factor VIII is a rare medical emergency that may arise spontaneously in post-partum women, and in patients with cancer or autoimmune disorders. It can also occur as a result of drug reactions or even in previously healthy patients. The immediate initiation of therapy with high-dose factor VIII concentrates may be life-saving. The mechanism for the acquired production of inhibitors to factor VIII is currently unknown.

The patient in the picture developed a life-threatening acute upper-airway obstruction from uncontrolled haemorrhage into the oropharyngeal tissues and base of the tongue, as a result of the acquired production of an inhibitor to factor VIII. The patient was a previously healthy, non-pregnant woman; no predisposing factors were identified. The diagnosis was based on a prolonged partial thromboplastin time and lack of response to an infusion of fresh frozen plasma. Confirmation of the diagnosis came from an assay of specific clotting factors, and demonstration of a low factor VIII level.

The displaced and engorged tongue protruding from the mouth is an obvious feature; haemorrhage into the tissues of the neck is also clearly visible. Airway management is usually difficult, and in this case was achieved by nasotracheal intubation under fibre-optic guidance: this is being increasingly recognised as the best technique to treat upper-airway obstruction.

GM Joynt
Department of Anaesthesia and Intensive Care
The Chinese University of Hong Kong
Prince of Wales Hospital
Shatin
Hong Kong

References