Topical Haemostatic Agents in Head & Neck Surgery: A Narrative Review

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Complications secondary to haemorrhage in head and neck surgery can be fatal. Haemostasis is achieved both through surgical control and prevention of bleeding. The body”™s own coagulation pathway is not at all times adequate to form and maintain stable blood clots. Topical haemostatic agents have been developed to promote and enhance blood clot formation. However, the optimal use of topical haemostatic agents has not been established. Despite the development and update of topical haemostatic materials and devices in recent decades, postoperative cervical haematomas after head and neck surgery, a feared complication, remain relatively high at 3.4%. Alongside increased post-operative stay, return to theatre and cost, this complication bears over a five-fold increase risk of death. As such, it is important to establish and understand effective, safe and easy-to-use topical haemostatic agents. An understanding of the coagulation pathways and haemostatic targets is intrinsic to appropriately choosing and using the correct haemostatic tool. In this narrative review, we describe the structure and mechanism of topical haemostatic agents, summarise the application of commercially available topical haemostatic agents in head and neck surgery and, where available, review the clinical studies evaluating the safety and efficacy of topical haemostatic agents in head and neck surgery.