All operations for exophthalmic goitre are not without danger, due mainly to three causes, first, hemorrhage; second, acute thyroidism; third, the anesthetic.

The hemorrhage is attributable to the friability of the organ, the fine structure and dilated condition of the vessels causing great vascularity. Extreme care must therefore be taken in handling the gland until the main arteries have been secured, and every vessel, when cut, immediately tied. Hemorrhage undoubtedly stimulates the absorption of thyroid secretion, and also increases the danger of shock. Should much blood be lost, the quantity may be made up by the injection of saline solution. The cautery should not be used, on account of the risk of secondary hemorrhage.

The occurrence of post-operative thyroidism, or thyroid poisoning, is a most dangerous complication. The symptoms come on within twenty-four hours. The temperature rises even to 107 deg. F.; the pulse runs up to 130, 160, or higher; the respirations increase and may be of the Cheyne-Stokes' type; the patient becomes extremely nervous, tremulous, and perspires freely; tetany is often observed and death frequently occurs suddenly.

No satisfactory explanation of acute thyroidism has yet been offered. It is attributed to increased absorption of thyroid secretion from the wound, or to rough handling of the gland, pressing the secretion into the circulation. This, however, is negatived by the fact that the symptoms do not immediately ensue, and also that thyroidism occurs after sympathectomy, where the gland is untouched; and after tying the supplying arteries; or even after operations on other parts of the body, as on the pelvic organs. It would seem that the nervous irritability, combined with the results of the increased absorption of thyroid secretion are responsible for the symptoms. The treatment consists in saline injections, suprarenal extract, with atropine and morphine.

It is an established fact that patients suffering from goitre, especially the exophthalmic variety, take a general anesthetic badly. Many fatal cases from this cause have occurred during operation. On this account, many operators, as Kocher, Curtis, Witherspoon, and Ballin, consider the administration of chloroform and ether dangerous in goitrous subjects and have recommended and used local anesthesia quite extensively in their work. Mayo gives preference to ether, and reserves cocaine for the worst type of nervous cases. It has not been proved that cocaine increases the symptoms of Graves' disease,