

nary signs of urinary infiltration were found. Three incisions were made, and the tumor before discovered was found to be a sac lined with mucous membrane, and communicating with the urethra by a comparatively small opening. Microscopic examination showed that this cavity was not a retention-cyst, while the microscopic appearances entirely precluded the possibility of its being an exaggeration of the dilatation commonly observed behind strictures. The fistula resulting from the incision was closed by a repeated plastic operation. Nearly all the cases observed have been found in the persons of young patients, the abnormality probably depending upon the fact that the peripheral and central parts of the urethra have, in their foetal development, not united before urine is forced into the central part.

LIGATION OF THE VERTEBRAL ARTERY FOR EPILEPSY.

The notes of a case of epilepsy in which the vertebral artery was tied are communicated by TELFORD SMITH (*The Journal of Mental Science*, vol. clv., New Series, No. 119, p. 518).

The patient was a congenital imbecile, eleven years old, who had from twenty to thirty fits per month. In 1881 the left vertebral artery was tied by Dr. Wm. Alexander. The operation was followed by arrest of the epilepsy and marked mental improvement under training. This improvement lasted four years, after which the fits returned, and his mental state steadily deteriorated; until in 1890 he became a hopeless epileptic idiot.

Ligature of the vertebral arteries for epilepsy has been performed by Dr. Alexander with the expectation that the diminution of the blood-supply to the brain and spinal cord would be more permanent than after ligation of other vessels, on account of the absence of anastomosing branches, and the restraints to dilatation of the unligatured vessels by the bony canals through which the cerebral vessels pass. On account of the uncertainty of cure, however, Dr. Alexander has ceased to perform this operation.

A CASE OF PERFORATING GUNSHOT WOUND OF THE CHEST AND OF THE WRIST-JOINT.

The results of antiseptic surgery as applied in military practice are well shown in the case reported by THOMSON (*Indian Medical Gazette*, vol. xxv., No. 9). The patient was wounded by balls fired from a carbine at short range. One bullet entered the chest on the left side, at the level of the ninth rib below the angle of the scapula, and made its exit one inch below the left clavicle, and three inches from the left clavicular notch. Beyond shock and slight dyspnoea, traumatopnoea was the only sign of lung wound present. The second ball traversed the left wrist-joint. Both wounds were carefully washed with 1:5000 perchloride of mercury solution, were syringed with one per cent. tincture of iodine lotion, and, after the removal of all foreign bodies, were dressed antiseptically. Beyond dulness and bronchial breathing noticeable for a few days over the middle portion of the left lung in front and behind, recovery, in so far as the chest-wound was concerned, was uninterrupted. At no time was there any hæmoptysis, or even a tinge of blood in the sputum. There was sloughing in the wrist-wound, which finally healed by granula-

tion and cicatrization. Six months later the patient returned to duty able-bodied in every way, and with good motion of the wrist-joint.

THE ULTIMATE RESULTS OF THE TREATMENT OF GOITRE BY LIGATURE OF THE THYROID ARTERIES.

The histories of twenty-one cases of goitre treated by ligature of the thyroid arteries, together with deductions drawn from personal experience and a careful study of the literature of the subject, are communicated by RYDYGIER (*Archiv für klin. Chirur.*, Bd. xl., Hft. 4). The majority of these cases were operated on in 1887 and 1888, so that sufficient time has elapsed to speak with some authority upon the final results. In all except the first case the two inferior and the two superior arteries were tied at one sitting, two ligatures being applied to each vessel, and the latter being divided between these threads. The fear, at one time entertained, that gangrene might follow this interference with the blood-supply of the thyroid, has been abundantly proved to be groundless, the crico-thyroid arteries and the vessels of the œsophagus providing a sufficient supply to maintain the vitality of the part. The fear has also been entertained that ligation of all the arteries would be followed by the same systemic changes observed after total extirpation of the thyroid; as a matter of clinical fact, this result has not been observed, nor should it be expected, since it is found that the gland never disappears entirely. Simultaneous ligation of the four thyroid arteries is, however, not to be recommended in all cases. Thus in the fibrous goitre, this method is necessarily abortive, for cure is effected by the replacement of the parenchyma of the enlarged gland by fibrous tissue, which, in the course of its cicatricial contraction brings about disappearance of the enlargement; hence, when the tumor already consists of cicatricial tissue, cutting off of the blood-supply can be of little service. Also in the case of cystic goitre no good effect can be hoped from ligation of the arteries; indeed, when this method of treatment is adopted in *struma gelatinica*, it seems at times to favor the development of cysts.

In colloid goitre a treatment by ligature is followed by distinct alleviation of the subjective symptoms. Tumors of great size are diminished only slightly, smaller tumors show much more marked improvement. This is probably because in recent cases, where the enlargement is not great, there is a large amount of unaltered gland tissue remaining. It is the disappearance of this which occasions the diminution in the size of the growth.

The best results follow this treatment when it is applied to moderately large, recent, parenchymatous goitres, where the glandular structure is little altered; these rapidly diminish in size after ligature of the supplying vessels, especially where the tumor is markedly vascular, and frequently the neck becomes entirely normal in appearance.

TWO CASES OF RECURRING CARCINOMA OF THE GENITALIA.

HERZFELD (*Wien. klin. Woch.*, 3 Jahr., No. 32) holds that total extirpation of the uterus, either by abdominal incision or through the vagina, is not indicated in cases of carcinoma of the vaginal portion of the cervix uteri,