

observed in all parts of the body; the weather, at the time, was not at all remarkable for its warmth.

Death by hæmatemesis is very unusual in cirrhosis of the liver. Dr. Gordon, in 1854 (*Dub. Quart. Jour.*, Vol. XVII., p. 345), published a case of this event in cirrhosis, the more remarkable as it occurred in a boy of 15; he used to suffer from purpura and epistaxis; this boy had neither jaundice or ascites. Dr. Gordon quotes another case of this event, and mentions that Dr. Law, in 1829, drew attention to the occurrence, and held that it was the only disease of the liver in which hæmatemesis occurs. Among many cases of various forms of cirrhosis of the liver, including the syphilitic and the fibro-amyloid, I had not seen this mode of death until the present case. The recorded instances, not at all numerous, of this complication, show that there may or may not be ascites and abdominal varix, as fatal hæmatemesis has occurred with and without these phenomena. Murchison^a mentions two cases of it, in one of which there was neither ascites nor enlargement of the abdominal veins, while in the other the ascites was copious, and the venous development unusually great. The hæmorrhage is undoubtedly an exhalation or diapedesis of blood from over-distended capillaries, and independent of any ulceration or macroscopic lesion.

ART. VII.—*On Amputation of the Penis at the Pubes.* By HENRY J. TYRRELL, F.R.C.S.I., M.R.I.A.; Surgeon to the Mater Misericordiæ Hospital, &c.

IN amputation of the penis, when, from the extent of the disease, it becomes necessary to remove the organ from the pubes, the crura are liable to retract beneath the pubic arch, and, consequently, much difficulty is often experienced in arresting the hæmorrhage from the stump.

An old man, aged seventy, with very extensive epithelioma of the penis, of four years' growth, was admitted into the Mater Misericordiæ Hospital, under my care, last November. The disease engaged so much of the organ that I was obliged to remove it as far back as the pubes, and I adopted the following simple method of preventing the contraction of the corpora-cavernosa.

Having with my left hand drawn the penis well forward, I trans-

^a Lectures on Diseases of the Liver, p. 266.

fixed, with a strong acupressure pin, the crura immediately in front of the pubes, and tied a thin tape tightly round the penis behind the pin. I then, with one stroke of a small amputating-knife, cut through all the organ in front of the pin. The tape being gradually loosened, all the arteries requiring notice were twisted; the urethra was next slit for half an inch, and I united the mucous membrane of the urethra to the skin by three sutures of carbolized gut; a piece of cork was stuck on the sharp end of the acupressure pin, *which was not removed*. No dressing was applied; and the patient was directed, when he desired to pass water, to press the bell-end of a vaginal glass speculum against the pubes, and to micturate through it. I also desired my dresser, Mr. Dempsey, if any hæmorrhage came on during the day, to apply a figure of 8 suture round the pin and over the stump sufficiently tight to control it.

Everything went on well; no pain was caused by the pin. I did not remove it for three days. No further details are necessary.

It is quite evident that by the use of the pin in the manner described, *all danger of hæmorrhage is avoided*; and also, by leaving it in for a few days, rest to the stump is secured, and *time is given for the speedy union of the mucous membrane and integument*.

As far as I know, this mode of treatment has not been before described.

Erichsen,^a when speaking on this subject, says:—"There are usually five arteries requiring ligature. In securing these trouble is not unfrequently experienced in consequence of the retraction of the stump that is left. The liability to this, however, is lessened by tying a tape round the root of the penis before the operation is commenced, or by directing the assistant to hold it firmly between the fingers, and thus to prevent the retraction of the stump, which may otherwise draw back and be buried under the pubic arch, almost in the perineum. Should it not do so, and oozing continue, a female catheter must be passed into the bladder, and a firm compress applied with a T bandage."

Gross,^b in his "System of Surgery," p. 873, makes the following remarks:—"When the bleeding from the cavernous bodies is, as sometimes happens, unusually troublesome, the best way to arrest it is, to transfix them with an acupressure kneedle tightened by a ligature passed round it elliptically, as in the common hare-lip. The instrument is removed at the end of twenty-four hours.

^a The Science and Art of Surgery. By J. E. Erichsen. Fourth Edition.

^b A System of Surgery, &c. By S. D. Gross. Fifth Edition.

Bryant^a makes no allusion to the retraction of the crura. He uses the galvanic cautery for the amputation of the penis, but when it cannot be had he recommends the old operation with the knife, and recommends Clover's clamp for compressing the penis instead of tape.

Humphrey,^b in Holmes' "System of Surgery," Vol. I., p. 181, makes no mention of the matter at all; neither does Millar,^c Skey,^d Fergusson,^e Syme,^f Pirrie, or Nélaton.

Velpéau, in his "Operative Surgery," English edition, p. 775, makes the following remarks when discussing the mode of treating hæmorrhage after this operation:—"The noose of thread passed through the corpora-cavernosa, as recommended by M. Langenbeck (Rust's Handb. der Chir., Vol. I., p. 167), would only be useful in cases where, as in that by M. Hall (Gaz. Med., 1836, p. 748), we were obliged to carry the bistoury as far down as under the pubes, and which, according to M. Rorbye, he had heard recommended in Germany."

Dr. Humphrey, in the article above quoted, says it was Mr. Teale^g who introduced the method of keeping the orifice of the urethra open by slitting the urethra and uniting the mucous membrane to the skin; however, in this improvement, Velpéau anticipated Teale, for, in his "Operative Surgery," p. 775, he recommends the uniting of the skin to the urethra by means of three points of suture, according to the process he had pointed out in speaking of cancer of the lips.

In Cooper's "Surgical Dictionary," second edition, edited by Lane, it is stated:—"The bleeding arteries are to be immediately ligatured. Should a general oozing from the wound still continue, it may usually be arrested by the application of ice to the part, or of lint dipped in ice-cold water; but should this be ineffectual, a styptic, such as the solution of the perchloride of iron, may be applied to the bleeding surface."

Chelius^h speaks of the difficulty of arresting the hæmorrhage, and

^a The Practice of Surgery. A Manual. By Thomas Bryant. 1872.

^b A System of Surgery, &c. By various authors. Edited by T. Holmes. Second edition.

^c The Practice of Surgery. By James Millar. Edinburgh. 1852.

^d The Principles and Practice of Operative Surgery. By Frederic C. Skey. 1858.

^e A System of Practical Surgery. By W. Fergusson. Fourth edition. 1857.

^f Principles of Surgery. By James Syme. London. 1852.

^g Med. Times and Gazette, Vol. XIX., p. 354.

^h A System of Surgery. By J. M. Chelius. Translated by J. T. South. London. 1847.

mentions the means adopted by various operators:—"In removing the penis near the pubic bones, Schreger has recommended the cut to be made with repeated strokes to prevent the retraction of the stump, and render the application of the ligatures more easy. An assistant presses up the bulb from the perineum forwards towards the pubic angle, and then, the operator having first drawn the penis and the skin forwards, divides the skin upon the dorsum penis and ties the dorsal arteries. After making the second cut he proceeds in the same way with the cavernous arteries of the penis; and after the third, with the cavernous arteries of the urethra, and the bleeding having been thus stanch'd, the remainder of the penis must be cut through."

Langenbeck's method to prevent the retraction of the penis is, "to cut through the dorsum penis so deeply into the cavernous bodies, that he can see their white edges and the septum; a loop is then drawn through both, and the penis completely cut through. The ligature serves to keep the stump steady, and to draw it forwards."

The penis has also been removed by tying. Chelius:—"A silver male catheter must be passed through the urethra into the bladder, a waxen silk thread applied beyond the diseased and upon the healthy part of the penis, and introduced into a loop-tier or some particular instrument for tying a ligature. This instrument must be screwed so tight that the part before the ligature shall be deprived of all feeling; the instrument is to be fastened with sticking-plaster, and the cancerous part covered with lint and compressed. On the second or third day, usually, the largest portion of the dead penis may be removed with scissors or bistoury, without bleeding or pain, and on the fourth or fifth day the ligature separates."

The advocates of the elastic ligature (the use of which I believe to be barbarous, cruel, unscientific, and worthy of the dark ages of surgery) will, no doubt, apply it to the amputation of the penis, and assert that it is not only the safest, but the most *speedy* and effectual mode of proceeding.