ON THE BENEFICIAL RESULTS OF UNDESIGNED AND ACCIDENTAL HÆMORRHAGE IN CERTAIN CASES.*

By SAMUEL HEY, F.R.C.S.,

Senior Surgeon to the Leeds General Infirmary, etc.

EVERY physician is well acquainted with what are frequently called critical hæmorrhages, in which a patient, reduced to the lowest point, from that moment steadily recovers; *e.g.*, in typhus, hæmorrhoids, and hæmoptysis. The surgeon often meets with cases in many points analogous to those above alluded to, but they have not been prominently noticed by surgical writers.

1. Excessive hæmorrhage in severe injuries is often followed by speedy recovery, the higher and destructive results of inflammation are prevented, and sufficient power remains only for the adhesive process and union by first intention. Thus, a bad case of cut-throat, whose life was despaired of for many hours, recovered completely in eleven days. Again, in cases requiring primary amputation, where the loss of blood has been so great that the operation must be deferred for several hours, the patient not unfrequently progresses favourably to recovery without a bad symptom. This has to me often, through a long course of years, been so striking that I have sometimes ventured to predict a happy termination. In these cases, the patient seems to be reduced to the more favourable condition of one suffering from chronic disease. For example, about three months ago, I had to operate on two persons during one week for injury of the upper arm. The first, from gun-shot, had no loss of blood. The second, from severe laceration and compound fracture, was, by hæmorrhage, reduced to the last extremity. The first died speedily from traumatic gangrene; the last recovered without drawback. They were about the same age.

Numerous cases of this kind have led me to be little anxious about considerable bleeding during an operation where the antecedent effusion of blood has been slight; having, however, due regard to the constitutional condition of the patient, and his probable powers of restoration.

2. The second class of examples are those in which bleeding is beneficial, though undesigned and unwished for, and, indeed, occurring where it might seem to be the most undesirable.

A gentleman, aged 55, had in the epigastric region a tumour, ten inches in diameter, followed by ascites to the fullest possible extent. The tumour was connected with the liver, was marked with veins on the surface, and was supposed to be malignant. The skin of the abdomen and the lower extremities were excessively œdematous. Paracentesis was performed three times at intervals of six weeks. After the last operation, the patient appeared to be dying for several hours; by the use of stimulants he rallied. On the third day, a catheter was introduced through the wound; serum, very deeply coloured with blood, was drawn off, and it was then discovered that a deep-seated vein had been wounded, and its contents poured into the abdomen. From this time, recovery commenced, the dropsy disappeared, and he became again a strong and hale man, and is still living at the age of seventy-five.

3. The most common order of instances where undesigned hæmorrhage is not only useful but curative, is to be noticed in large, and deep, and intractable phagedænic ulcerations. I have seen this so often that I am almost at a loss to select examples.

A man suffered from a large and deep burn on the chest, and, after many weeks, appeared to be hopelessly sinking. A considerable venous hæmorrhage took place from the flabby granulations, and straightway they became healthy, and cicatrization and recovery took place rapidly.

Many instances have come under my notice where deep syphilitic ulcers in the groin, vulva, and nates, and on the legs, have at once cleared up on the occurrence of considerable hæmorrhage, especially where the patients had previously undergone a course of antisyphilitic treatment.

Two patients are at present under treatment at our hospital, one an in-, the other an out-patient, where the nose, lips, palate, and bones, have been to a great degree destroyed. In both instances, a spontaneous vigorous hæmorrhage has cut short the disease, and in one has led to all but perfect cure of the ulcerations, leaving only the unsightly results of destructive disease.

It was only after I proposed to write a few lines on this subject, that I learnt that my friend Mr. Jessop, formerly our house-surgeon, had, in our JOURNAL last December, noticed briefly cases where even the femoral artery had been opened by phagedænic ulceration, and the hæmorrhage thence arising had arrested the disease. Mr. Jessop now

informs me that he has, in one case of syphilitic ulceration, tested by *practice* the value of this teaching of the "effort of nature," by opening the arteria dorsalis penis with every good result.

I only throw out these few remarks to lead to further observation. To enter into physiological discussion would require rather a book than a short unpretending practical paper.

CASE OF THYROID DISLOCATION OF THE HIP-JOINT: WITH AN ACCOUNT OF ITS DISSECTION.

By THOMAS ANNANDALE, F.R.S.E.,

Surgeon to the Edinburgh Royal Infirmary.

As opportunities for the dissection of cases of recent dislocation of the hip-joint are not frequent, I trust an account of the following case may be considered worthy of a special record, more particularly as it proves, in my opinion, the correctness of the views lately published by Professor Bigelow (*The Mechanism of Dislocation and Fracture of the Hip*). This case is the fifth recent dislocation of the hip-joint which I have reduced by manipulation. Two of these were thyroid dislocations; one was a dislocation on to the dorsum of the ilium; one into the sciatic notch, and one on to the pubes. The experience of these cases, and a study of the one related, have convinced me of the importance of the Y ligament as an agent in preventing under certain conditions, and assisting under others, the reduction of dislocations of the hip-joint. I therefore cordially add this testimony to the value of Professor Bigelow's observations.

CASE.—The patient was a strong healthy man, 19 years of age, who was admitted into my wards in the Royal Infirmary, on account of a serious railway injury, in December 1869. His injuries consisted of a comminuted fracture of the right humerus, a compound fracture of the right leg, a compound comminuted fracture of the left forearm and hand, and a dislocation of the head of the left femur into the thyroid foramen. The symptoms of the dislocation were well marked, and consisted of slight flexion of the thigh and abduction of the whole limb, which was fixed in this position. The patient was too weak to admit of the removal of the injured limbs; so we contented ourselves with administering stimulants, and applying heat to the surface of the body. Under this treatment, his pulse rose a little; and, having given him one or two inhalations of chloroform, I reduced the dislocation of the hip by manipulation with great ease.

The patient gradually sank, and died about two hours after admission. An examination of the injured joint about fourteen hours after death, showed the following condition. There were slight extravasation of blood among the muscles on the anterior, outer, and posterior aspects of the joint; and extravasation of blood and severe bruising and laceration of the muscles on the inner aspect of the joint, more particularly of

Fig. 1

the fibres of the obturator internus, portions of which had been forced into the acetabulum. The tendon of this muscle was not ruptured. The head of the femur lay in the acetabulum, and the capsular ligament

* Read before the Surgical Section at the Annual Meeting of the British Medical Association in Leeds, July 1869.

was extensively torn on its inner and lower aspects, as is shown in Fig. 1, *a*, *b*, *c*, *d* being the edges of the torn capsule. The round ligament *e* was completely torn away from the head of the femur, and attached to it was a thin layer of articular cartilage and some small particles of bone. The anterior, and a greater part of the posterior

Fig. 2.

portion of the capsular ligament were entire; and a careful dissection of them showed, most distinctly, Professor Bigelow's Y ligament uninjured. The anterior aspect of the joint is represented in Fig. 2, *a* being the anterior spinous process of the ilium, *b* the Y ligament, and *c* the edges of the torn capsule.

REMARKS ON POST PARTUM HÆMORRHAGE.

By H. CRIPPS LAWRENCE, Esq., L.R.C.P.Lond.,
Late Resident Medical Officer, and late Registrar at Queen Charlotte's
Lying-in Hospital; etc.

UNDER the term "Flooding", or "*Post partum* Hæmorrhage", it is desired to include, in reference to the following remarks, that loss of blood, occurring after the birth of the child, either before or after the expulsion of the placenta, of such amount as to produce undue constitutional depression, and resulting from the following causes, acting singly or conjointly, viz., (*a*) inefficient uterine contraction; (*b*) limited rupture, or other morbid condition of the cervix uteri leading to hæmorrhage.

When the late Dr. Hunter urged that "Principles, not phenomena, laws, not isolated facts, are the lawful objects of inquiry," he struck the key-note of a highly scientific and life-tending philosophy.

In the sequel, detailed descriptions of individual cases will not appear, but the attention will be rather directed to the theoretical and practical value of *compression of the abdominal aorta* as an auxiliary agent, in the arrest of the above forms of uterine hæmorrhage.

While Resident Medical Officer at Queen Charlotte's Hospital, I was much struck with the valuable results attendant upon the treatment of the third stage of labour, and of *post partum* hæmorrhage, as practised at that institution. Since the practice referred to, which I strenuously advocate, differs essentially, in some of its details, from the teachings inculcated in the medical schools of this country, as far as I am aware, and also from the doctrines promulgated by English obstetrical works, I will first briefly refer to the *modus operandi*.

The patient is delivered on her left side; during and after the birth of the child, the uterus is "followed down" with the left hand, while the right supports the perineum; the funis is then tied and divided; the patient is now ordered to turn on her back, the knees and limbs are straightened, and the binder is applied *at once, before* the expulsion or withdrawal of the placenta. In applying the binder, six small blankets are generally inserted into it, in the middle line, beginning below. As the first three pins are successively introduced, the binder is pulled gradually tighter and tighter; its greatest pressure is thus brought to

bear about the level of the fundus uteri; beneath the three upper pins, the binder is slackened, to allow the diaphragm to act.

In the event of flooding, actual or imminent, the following *modification* is adopted. Five or six ordinary babies' diapers are rolled up tightly, one within the other, and the last free edge is secured by small pins, so as to make a cylindrical pad, about eight inches long. This pad is then placed next to the skin of the abdomen, on the left side, *over the abdominal aorta and the uterus*, which has first been "defined", if possible, by grasping it firmly. After this, the binder is carefully applied over the pad, and the patient is now placed on her left side. A primipara in ordinary cases has no ergot given her, but each multipara takes from fifteen to thirty minims of the extractum ergotæ liquidum in water, immediately after the birth of the child, as a *precautionary* measure.

In cases of morbid contraction or undilatability of the cervix uteri or vagina, it is a questionable procedure to give ergot during the last few pains, previously to the passage of the head of the child, however desirable it may be under other circumstances, lest limited rupture of the cervix and consequent troublesome hæmorrhage ensue. In the event of severe immediate flooding, the *first* thing would be to adjust the pad over the abdominal aorta and uterus, *even before* removal of the placenta.

In an ordinary case, the patient is left alone for twenty minutes, though watched to see that no hæmorrhage occurs; if the placenta be not expelled by that time, examination with the finger generally finds it in the vagina, and it is removed or withdrawn by a *steady* traction of the funis. A jerking intermittent traction is most reprehensible, as it irritates the cervix, which then contracts upon the placenta, and prevents its extraction. Adherent placenta and other complications are treated upon ordinary principles.

Should the above measures fail, smart brisk slapping of the nates and vulva with cloths, wrung out in iced water, and applied over the pubes, ergot in half-drachm or drachm doses, and brandy, if necessary, also ice passed up the vagina, would be resorted to; these failing, then any of those other measures, which from time to time are advocated, and by their success are deemed worthy to be classed as precedents to act upon, in future like emergencies, might follow. All these can be carried out much more effectually now, as both hands are free to work with.

I may as well say a word here with regard to a point in the differential diagnosis between flooding from inefficient contraction of the uterus, and that hæmorrhage which arises from limited rupture of the cervix uteri. It was taught me at Queen Charlotte's Hospital by a case of most alarming flooding, in which all measures duly directed to the uterus most effectually secured the contraction of that organ, but failed to check the hæmorrhage, which rapidly continued, the blood being of a bright arterial colour. It was ultimately arrested by means of ice, placed high up in the vagina repeatedly, with injections of cold water *per anum*, and an *abdominal compress*. The ice should be broken into pieces about the size of a hen's egg, and left in the water, while the treatment is going on; the sharp edges and spicula become rounded off, and do not irritate the soft parts of the mother.

It will be evident that the *principle* herein advocated is to use greater or less *compression over the abdominal aorta and uterus, before proceeding to further measures*. The limits of these remarks prevent any prolonged inquiry into the relative theoretical value of this principle, as contrasted with others. I would say, however, that it is by no means wished by me to undervalue or distract attention from any other methods of treatment, for each and all should stand in the relation of fellow-helpers towards the same end. I rather ask my professional brethren, in determining how they will arrest flooding, to consider first its causes, and then not only whether such and such measures are generally useful, but which measure will be *the best one to commence with*. To assist this decision, we inquire whether flooding will sooner cease, by directing the treatment in the first instance to the abdominal aorta, or to the uterus?

In flooding, the tendency to death is averted just in proportion as a greater amount of blood is kept circulating in the body, *absolutely* as well as relatively. That this result is most likely to follow an efficient arrest of the flow of blood through the abdominal aorta, will be evident upon considering how a well applied abdominal pad will act.

1. It exerts considerable equable and permanent pressure over the abdominal viscera, including especially the abdominal aorta and uterus, assisting materially to keep the latter contracted.

2. By moderating the flooding, blood is, by the pad, kept circulating for a longer time in the upper part of the body, and even in the brain itself; hence it averts syncope, which might prove fatal directly, or indirectly by inducing secondary relaxation of the vessels, and subsequent increase of the flooding.

3. It supplies the vacuity in the abdomen, caused by the expulsion of