

Amongst other cases cited to demonstrate this proposition the author gives a résumé of a communication made to the Royal Society, London, in 1881. It is that of a boy *et* 2 years, who lost the shaft of the humerus from suppurative periostitis ending in complete necrosis of the humeral diaphysis. The necrosed bone being removed, the whole space granulated up without the formation of a new bone from the periosteum which had been left *in situ*, the result being a flail-like arm.

Fifteen months afterwards the condition of the arm was as follows:—No increase in length of arm—barely two inches from acromion process to distal extremity of humeral shaft—the proximal fragment tapered to a point—from this point to the condyles a complete absence of bone—could not raise his forearm to his breast—the muscles were intact—the power was there, the lever and fulcrum were wanting.

It was determined to transplant bone from the tibia of a patient with anterior curves.

An incision was made down to the head of the bone of the humerus and continued downwards, a sulcus was formed in the anatomical line of the shaft for about two inches. Into this sulcus were placed minute fragments of bone chiseled from the two wedges that had been removed from the tibia alluded to. The tissues were drawn over these and the wound healed without pus production. Two months after a portion of bone an inch in length and three-quarters of an inch in thickness, was found firmly attached to the upper fragment.

Two other larger wedges of bone were similarly dealt with, and inserted two months after the first graft and a third couple, five months after. These filled the gap in the arm to the extent of four and a half inches, the last graft uniting with the distal fragment.

Examined seven years afterwards the arm, though shorter than the sound one, had increased in length one and a half inches. The circumference had also increased considerably and was somewhat irregular. The patient could use the arm for a great many purposes, taking his food, adjusting his clothes, and in many games.

These results present some unexpected facts, if we are to judge of the prevalent views regarding diseases of bone before the days of antisepticism. Truly the surgery of to-day has advanced even in the country of the immortal Syme.

MEDICINE

Diagnosis of Stricture of the Œsophagus.

Alexander Ocston, Prof. of Surgery, Aberdeen University, says diagnosis of stricture of the œsophagus is by no means always easy.

Difficulty of swallowing and regurgitation of food, similar to those present in stricture, is sometimes complained of in dyspepsia and even in bronchitis with emphysema. The like symptoms may be observed in paralysis of the gullet after diphtheria.

Stricture at the lower end is generally cancerous and occurs in subjects after middle life. These are the easiest cases to diagnose. The painful sensation of distension after swallowing solid food felt above or at the epigastrium, in the centre of the thorax and producing breathlessness and distress is very distinctive if well described. But we are dependent on description, and some patients cannot describe the sensations in terms that we can satisfactorily recognize. Besides, it must be remembered that the sensations we have all felt after hastily swallowing much puffy food or large morsels is the same as that in stricture, and occurs, therefore, in normal persons. When a stricture is present and is not very narrow, it is not always possible to decide by this sign alone. Here the probang or œsophageal bougie is a valuable instrument; but it has its disadvantages. If a small probang is used, it will pass the stricture without detecting it; it is also dangerous. Many consult their medical attendant for the first time, not because they have the stricture, but because it is unusually troublesome at the time. Peri-œsophageal irritations, tending to suppuration or ending in abscess, are common in such patients, and if a probang be passed at such a time it sometimes perforates the wall, and at all events usually aggravates the condition or determines the formation of abscess. Besides, a probang may lead to a mistaken conclusion. I have seen one passed down so far that its handle tip was within an inch of the lips, and the operator declare there was no stricture, while on pushing it further so as to lodge its tip within the mouth, as can be done in a healthy person, it was arrested by an evident stricture.

Stricture of the upper end is generally due to cicatrix, valvular or annular, following a scald, the swallowing of caustic liquids, diphtheritic or syphilitic ulceration, or the like. It is usually