

H. R. Rishworth, which appeared this year in the January and March numbers of this journal.



Fig. 11.—Case 14. Antero-posterior view.

REFERENCE

Harnett, W. L. (1928). The Treatment of Fracture of the Femur. *Indian Med. Gaz.*, Vol. LXIII, p. 233.

TREATMENT OF COMPOUND FRACTURES OF BONES OF THE LEG BY SKELETAL TRACTION

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THE majority of cases of fractures of both bones of the leg can be successfully treated with splints and plaster applied after proper reduction and without continuous traction. In oblique or spiral fractures, however, there is a tendency for the displacement to recur as soon as the manipulative extension is discontinued, and also in some cases of compound fractures coaptation of the fragments after reduction cannot be maintained unless adequate traction is continued during after-treatment. In compound fractures with a more-or-less trivial external wound and a moderate amount of damage to the underlying soft structures, open reduction after a thorough surgical toilet of the wound and immediate plastering gives very good results; but when the patients come under observation after the infection has settled in the tissues, or where there is extensive mutilation of the soft parts, the amount of toilet necessary for immediate plastering becomes impossible. In them it is imperative to keep the wounds open for purposes of free drainage of the infection and management of the wound. Winnett Orr's method can be used successfully in certain types of infected fractures, but there still remains a group of cases where any attempt to practice this method will cause the infection to continue and spread along the tissues, considerably jeopardizing the life and the safety of the limb of the patient. In these cases where immediate plastering is impossible one has to depend on continuous traction and proper splinting for their management.

I have found Thomas' bed knee splint bent at the knee to the desired angle admirable in maintaining fixation and giving support. As the presence of infected wounds on the surface

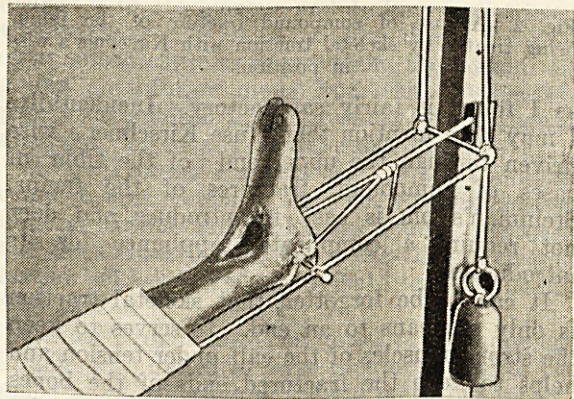


Fig. 1.—A case of compound fracture of the talus being treated by skeletal traction with Steinman's pin in position.

of the limb prevents the use of the time-honoured sticking plaster extension, I have used skeletal traction by Steinman's pins driven through the calcaneus (os calcis) with uniformly good results. I have treated six cases of compound fractures of the tibia and fibula, and one case of compound comminuted fracture of the talus (astragalus) by skeletal traction. In all these cases infection was fairly severe and sequestra had to be removed before the wounds finally healed. In the compound comminuted fracture of the talus, after cleaning the wound and removing some of the comminuted pieces, I had to use skeletal traction to keep the ankle free for dressing and to relieve the patient of the most agonizing pain on slightest movement of the joint. The infection was so severe that the whole of the bone was destroyed and had to be removed at a subsequent operation. The relief that the patient got after traction was applied convinced me of the utility of the procedure.

Since the introduction of Kirschner's wire most surgeons have given up the use of Steinman's pins for purposes of skeletal traction. There can be no denying the fact that the size of the Kirschner's wire is a decided advantage. I commenced using the Steinman's pin before Kirschner's set was available in the medical college hospitals and continued its use

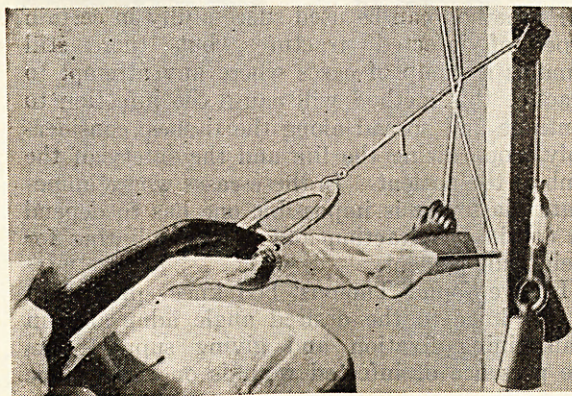


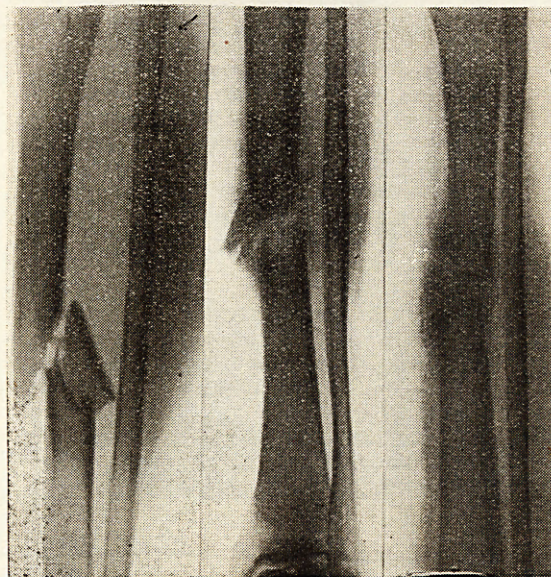
Fig. 2.—A case of compound fracture of the femur being treated by skeletal traction with Kirschner's wire in position.

as I found it fairly satisfactory. Incidentally, I may here mention that I use Kirschner's wire driven through the upper end of the tibia in cases of compound fractures of the femur. Steinman's pin is easy to introduce and does not require a complicated appliance for its introduction.

It cannot be forgotten that skeletal traction is only a means to an end. It serves to keep the strong muscles of the calf under tension and helps to keep the fractured ends of the bones near each other. The relaxation of the muscles is further helped by flexion of the limb at the knee. Once traction serves to bring the ends of the bones near each other, proper manipulation

helps to approximate them into a position most conducive to their union. This approximation has to be maintained by adjustments of the trough on which the limb rests and by keeping up the traction to the desired degree. It has been impressed in the strongest terms that for the healing of fractures immobilization of the bones is absolutely essential, but how often in practice we find that the maxim is forgotten and our attention is directed mainly to the treatment of the infection of the wound allowing the fractured ends to move at their own will. By the time the infection is sufficiently controlled, we rise from our slumber to find that the bone ends have moved and are nowhere near each other. Our attention should always be directed to the position of the bone ends. Constant vigilance has to be kept up to see that the trough is properly adjusted, pads being placed here and there to prevent the movement of the bone ends. Assiduous care is necessary during dressing, so that the position of the fractured ends are not disturbed.

It is seldom necessary to keep the traction pin in for more than four weeks. By that time sepsis is almost always efficiently controlled, and the bone ends adjusted in their position and held by a mass of granulation tissue with loose bone formation in it. After the pin is taken out plaster casing with a suitable window or a removable plaster casing is used with advantage. In cases of compound fracture of the type that is being discussed in this paper, sequestra of varying sizes according to the nature of the case



(a) (b) (c)

Fig. 3 (a, b and c) showing the condition of the bones at three stages during the treatment of a case of compound fracture of the tibia by skeletal traction. The skiagrams were taken on 26th August, 29th November, and 21st February, respectively.

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ADMINISTRATION OF OPIUM TO
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Drug Addiction Series No. 19

HABITUAL administration of opium to infants has been prevalent in India for centuries. That this custom was common in the 16th and 17th centuries is evident from some of the passages occurring in 'Ain-i-akbari'. Its use appears to have been started because of its power of allaying diarrhoea and vomiting, relieving cough and pains, such as colic, and producing sleep. Dr. Roberts in the Report of the Royal Commission on Opium (1893-94) stated that administration of opium to infants was common and that it was considered a popular household remedy for their ailments.

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and the severity of infection will have to be removed before complete union takes place.

As in all surgical procedures this method of applying traction has its admirers as well as opponents. Wardle (1933) in his article on fractures of both bones of the leg disfavours skeletal traction and is inclined to consider it as an unjustifiable interference. His views provoked criticism and the reply by Broomhead and Roberts (1933) will be read with interest. When I come to compare the results of my cases treated by this and by other methods, I have only admiration for it, not only for the better results obtained but also for the comfort it gives to the patient.

I do not believe in using it indiscriminately, but only in those cases in which the special conditions indicate it, and when other methods have failed.

In my case the pins through the calcaneus did not cause any damage to the bone, not even in the case of compound fracture of the talus where it had to be driven in so close to the septic wound (figure 1). The movements of the ankle joint were fairly maintained in all other cases except the one with fracture of the talus. In that case the resulting immobility of the ankle was not due to the pin but to the infection and fracture requiring removal of the whole bone. In my experience, which is admittedly limited, the advantages of the method far outweigh its seeming disadvantages.

REFERENCES

- Broomhead, R., and Roberts, N. (1933). *Brit. Med. Journ.*, Vol. II, p. 263.
Wardle, E. N. (1933). *Ibid.*, Vol. II, p. 146.

According to this authority, the custom was widely prevalent in the United Provinces, Rajputana, Malabar and in Bombay Presidency. Although this custom has declined of late years, the problem of doping of infants with opium is of considerable importance now in many parts of India and deserves investigation. During our work in the field on opium habit, we have been able to make a general survey of the problem in different parts of India and have made special study of many of its aspects particularly in the Punjab, the Central Provinces and Berar. In this paper we propose to give the result of these observations.

Incidence of the practice

Our enquiries in the field show that the habit of doping infants with opium still prevails in most parts of India. It is started when the infant is a few weeks old and is not carried on, as a rule, beyond the age of two or three years. The incidence of this custom in various provinces of India is briefly as follows:—

Punjab and North-West Frontier Province.

—So far as these provinces are concerned, although the practice was fairly prevalent twenty-five years ago, it appears to have declined considerably during the last 20 years. Even in the central districts of the Punjab, e.g., Ferozepore, Ludhiana and Jullundur, which are populated chiefly by the Sikhs and where the consumption of opium is one of the highest recorded in India, with the exception perhaps of Assam and Calcutta, the doping of infants with opium is comparatively less common now than it was two or three decades ago. The practice, however, is still indulged in all over the province, and there is hardly a town or a village in which a number of these cases cannot be detected at the present time. The practice is more prevalent in the central districts of Lahore, Amritsar, Gujranwala, Gurdaspur and in the rich canal colonies of Lyallpur, Montgomery and Khanewal in Multan district. In Hoshiarpur and Jullundur districts, where poppy cultivation is allowed and the use of unlanced capsules is prevalent, the custom of giving an infusion made from the capsules of poppy to children in the evening is met with although not to any considerable extent.

In the Frontier Province the custom is not so common except among the poor working classes in large towns like Peshawar, Bannu, Mardan and Dera Ghazi Khan, and in the villages on the border of independent tribal territory and Afghanistan.

United Provinces.—The practice of doping infants with opium in these provinces used to be much more extensive in the old days, but recent inquiries show that it has considerably declined, except in large towns and industrial centres like those of Benares, Cawnpur, Allahabad, Mirzapur, Agra, Lucknow and Moradabad. In such