SIXTY YEARS AGO

At this time of the year with the increased fire hazards which domestic heating, Xmas bonfires, Guy Fawkes Night etc. produce the problem of burns and their treatment is a very real one. Our readers will be interested in the paper we reproduce below which was published in the November 1911 issue of our Journal. Although 60 years old it has a very modern flavour.

THE ASEPTIC TREATMENT OF BURNS AND SCALDS

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The treatment of these injuries by the ordinary methods of oily applications is most unsatisfactory. That by the use of picric acid may be less so, but I have no experience of it. I do know, however, that extensive scalds or superficial burns, owing to their always being infected when they come under treatment, usually suppurate. This leads to further destruction of tissue, and scarring is very apt to ensue. At any rate, these injuries when treated in the usual manner with oily applications, remain a very long time in hospital and convalescence is slow. Having lately seen an instance in which after a large scald (by boiling water) healing took no less than seventeen weeks, in spite of grafting, I determined to treat the next case I saw by strictly aseptic methods from the very commencement.

On May 1, Gunner D. was admitted to the Alexandra Hospital at Cosham, having slipped into a copper of hot water. The right leg was scalded as high as the popliteal space, but the fore part of the foot and anterior surface of the leg had escaped. He had been dressed with carron oil and lint before arrival. I injected $\frac{1}{4}$ grain of morphia and had him anæsthetized at once.

After removing the dressing, the whole of the limb was thoroughly washed with plenty of methylated spirit poured from a bottle and scrubbed by sterile swabs. The scalded surface was freely rubbed by the swabs, and all the denuded epithelium removed. At least ten minutes were occupied in this manner. The limb was then washed with iodine water, one drachm of tincture to the pint. After this, plain white sterile gauze was placed in contact with the raw surface and absorbent wool and a bandage over all.

Next morning the temperature was normal and the patient quite free from pain. There had been such considerable exudation that the dressing was saturated. I thought it advisable to remove the wool and apply fresh, but the gauze was not touched. This was done again next day, and the leg was then kept outside the bedclothes to promote evaporation, and to try and get the wound to scab. The leg was slung next day from a cradle and this materially assisted matters.

On the morning of the tenth day the cotton wool was removed and the gauze was found perfectly dry over the whole area, with the exception of a place over the inner ankle and centre of the calf; the gauze at these places was soaked with pus, but no organisms were present. Over the rest of the leg the abraded surface had healed beneath the gauze. After soaking it off, the limb was slung from a cradle exposed to the air for four hours and a sterile gauze dressing reapplied.

The gauze again became soaked with pus over the unhealed areas, and so all dressings were again removed and the abraded surfaces dusted with boric powder and the limb kept slung. Final healing took place about the thirtieth day.

The ultimate result of this method of treatment was, I think, considerably better than one would have got if the injury had been dealt with by oily or greasy applications, but I think it is quite possible that one might improve on it. The great obstacle to immediate scabbing is, of course, the tremendous exudation of serum which follows the injury, and this is much accentuated by the scrubbing which one makes use of in order to sterilize the affected area. It was suggested to me that it would be a good plan to have slung the limb from a cradle covered with gauze for a couple of days, but in addition to the risk of infection the exposure of a large raw surface to the air would cause intolerable pain.

Captain Adye-Curran's suggestion, viz., to employ continuous immersion until the bulk of the exudation had ceased, and then to apply a sterile dressing might be worth considering, but there would again be the risk of infection. Another plan would be to smear the part with sterilized vaseline before applying the gauze.

Extensive injuries of this kind do not occur very frequently, and I am therefore recording my results in this case in the hope that others may be induced to try some other line of treatment than the old-fashioned carron oil application.

I think if one had applied ointment to the small raw surfaces which were evident when the gauze was removed on the tenth day, instead of trying to get scabbing under boric acid, much more rapid healing would have resulted.