Illustrations OF HOSPITAL PRACTICE: METROPOLITAN AND PROVINCIAL.

SALOP INFIRMARY.

FIVE CASES OF PUNCTURED WOUND OF THE KNEE-JOINT.

By WILLIAM NEWMAN, Esq., M.R.C.S., late House-Surgeon to the Infirmary.

THE publication of the treatment adopted in five cases of punctured wound of the knee-joint, all of which terminated successfully, may possibly not be without some advantage; and though the means adopted, far from being of novel or startling character, are of such every-day kind as hardly to merit special notice, still the result obtained is, I am induced to think, so far satisfactory as to justify the detail of the instances referred to.

The object of this paper is to recommend, in preference to the treatment usually laid down for punctured wounds of joints, of depletion in its various forms, cold applications, etc., the use of irrigation continued without intermission, and that too for so long a time as any symptom of pain or irritation shall remain about the injured part; not counting the propriety of the continuance of the application by the time that may have elapsed since its commencement, but by the state of the articulation. The apparatus is sufficiently simple, and can be applied in the meanest cottage at a moment's notice (no trifling advantage to a country practitioner); it being simply necessary to suspend over the joint a jug of water, from which depends a piece of lint, larger or smaller, according to the current desired. To secure the immobility of the limb, a back splint is applied behind the knee, with a single layer of thin bandage.

CASE I. John Hayes, aged 34, was admitted into the Salop Infirmary, on July 2nd, 1855, under the care of Mr. Stephens. He had met with a severe injury of the right knee-joint by a bill-hook, four hours prior to admission. He was chopping wood, and struck himself with the bill which he was using on the inside of the right knee. On admission, there was a clean cut wound on the inside of the patella, opening the knee-joint obliquely. The articulating surfaces could be seen, and some of the blood from the cut had flowed into the joint. This was removed so far as practicable. The edges of the wound were brought together by two sutures introduced through the skin, plaster, etc.; a splint was applied behind the knee; and the apparatus for irrigation was at once put in action.

12 P.M. The knee was easy and cool.

July 3rd (second day). The knee was slightly swollen. He had had some sleep; and was going on well.

July 4th (third day). The sutures were taken out. The wound looked well. He had no great pain.

July 6th (fifth day). The knee was not swollen; the cut had united. The patient was not in pain; and slept well. The irrigation was discontinued.

July 14th (thirteenth day). The knee was rather stiff. He had no pain in walking. There was no swelling. He was discharged cured.

CASE II. Robert Goring, aged 30, was admitted into the Salop Infirmary on July 13th, 1855, under the care of Mr. Humphreys. A sharp nail had been run into the right knee-joint just above the patella on the preceding evening. On admission, the joint was hot and painful; the synovial membrane was distended with fluid. The patient had no sleep the previous night. Irrigation was resorted to.

July 16th (fourth day). There was little or no swelling remaining. He had no pain; and expressed himself as much

better. Irrigation was discontinued; and he was ordered to lie quiet.

July 18th (sixth day). The swelling was quite gone; there was no pain; the knee was rather stiff.

July 21st (ninth day). He could walk; there was no pain nor swelling. The patient was discharged.

CASE III. David Owen, a middle-aged man, was admitted into the Salop Infirmary on July 16th, 1855, under the care of Mr. Wood. The left knee-joint had been wounded on the night of the 14th, by a sharp nail. He had been in much pain ever since; and had had no sleep. On admission, the knee was much swollen and reddened. The synovial membrane was distended with fluid; the edges of the puncture were reddened, and discharged unhealthy pus. Irrigation was resorted to.

July 17th (fourth day). He slept well last night for the first time since the accident. The knee was still very much swollen; but possibly not quite so hot.

July 19th (sixth day). The swelling was not so great; and the pain less.

July 21st (eighth day). He was going on well. The irrigation was ordered to be intermitted for an hour or two at a time.

July 25th (twelfth day). There was no swelling nor pain. The knee was stiff. The irrigation was discontinued.

August 11th. He was retained under observation until this day, but not on account of positive necessity from the state of the knee; and was now discharged cured.

CASE IV. Job Johnstone, aged 26, was admitted into the Salop Infirmary on August 2nd, 1855, under the care of Mr. Humphreys. He had wounded his knee-joint nine days before admission by running a steel pin into the front of the joint one inch below the patella. He had been in bed since, and had had leeches, fomentations, etc., applied to the joint. On admission, the joint was much swollen, hot, and very painful.

August 18th (twenty-fifth day). He had been treated for several days by irrigation; and the joint now presented the ordinary size and appearance. He was discharged cured.

The record of this case is imperfect; but I do not think that more than five or six days were occupied in the process of irrigation.

CASE V. John Pass, aged 14, a labourer's son, residing at Caythorpe, received a punctured wound of the right knee-joint, on January 1st, 1857. He had been struck by a fellow servant with a hay-fork. This had penetrated the knee-joint in front just below the patella. I saw him five hours after the accident: the joint was then full of fluid; the synovial membrane was distended with fluid, and its outline was most distinctly marked; the joint was very painful on pressure, hot, and swollen. Irrigation was resorted to.

January 4th (fourth day). He had been kept constantly quiet, and the water had been always dropping on the knee, which was much less swollen. He had no pain; but complained of stiffness. The irrigation was intermitted.

January 6th (sixth day). He was much better, and had no pain nor swelling. The irrigation was discontinued.

January 8th (eighth day). He was convalescent; he had no swelling nor pain; and could walk well.

There had been no return of pain, nor indication of mischief since. He is now quite well.

REMARKS. These cases are probably all very favourable ones of their class, and a similar successful issue could not always be hoped for from the same means. Still the result was satisfactory, and the time occupied but short. The application is spoken of in high terms by the patients.

In contradistinction to these cases, I saw a case in 1854, where a nail had been run into the knee-joint. Leeches, etc., were repeatedly applied under the direction of an eminent surgeon, as well as lotions of acetate of lead, with rest on a Liston's splint, and bandage; but more than six weeks were occupied in the process of recovery, and the pain suffered was excessive, in marked opposition to the few cases above recorded, as treated on a simpler, and on what appears to be a more satisfactory plan.