

increased, as the fibrous union is very apt to be lengthened out by use, whereas firm bony union resists any such strain; one of the skiagrams illustrates this well, showing the separation much wider than when the first photograph was taken.

Dr. ST. JACQUES: I am also in favour of the early movements and massage and in one of my cases I advised crutches after the fifth day. I also have had occasion to see cases treated by the old method, and in one case there remained about a half inch space between the two fragments, but the patient was lame and could only bend his knee a few inches. This has induced me to advise surgical interference. I have seen atrophy of the quadriceps after but two weeks immobilisation.

Dr. ARMSTRONG: I have always felt some diffidence in bringing such cases as these before students as such operations should only be done by experienced hands. I have never had any trouble with wiring patellæ, but I have seen stiff joints result with even amputation required, and death may follow the operation. It is a serious question whether one should be willing to run the great risk of infection of the knee joint for the sake of a better result which may be obtained if all goes well. Personally, I should want to know that I had a very good surgeon, that he was well equipped, that his assistants were capable and that he had a technique which he was using daily and was familiar with. The advantages and disadvantages of the case should be placed before the patient. With regard to the time for operating one does not always receive these cases early, but in cases where there is traumatism of the soft tissues one should wait until they are at their best resisting power. After an injury the circulation is interrupted and probably the lymphatics as well so it is better to wait till all temperature has subsided. A man should be able to do this operation absolutely without letting his fingers get into the wound. In general one should do this operation with rubber gloves, preferably new ones and nothing should enter that wound unless absolutely sterile. As to the stiffness afterwards that is very largely obviated by getting the patient up and walking about. The question as to the operation is still debatable, but I believe the technique is becoming more perfect every day and this is the proper operation provided the patient is in a suitable condition for it. I congratulate Dr. Hutchison on this remarkable series, and I think his results are such as one might well be proud of.

Dr. HUTCHISON: We all know that the getting of the patient on his feet and the walking about for the protection of the muscular tone of the quadriceps is the key to the situation, the bony repair goes on and