COMMUNUTED FRACTURE OF EACH PATELLA.

EXCISION OF ONE PATELLA, WIRING OF THE OTHER PATELLA. RECOVERY WITH USEFUL KNEES.

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B. B., male, forty-four years old, married, fell September 23, 1896, to the sidewalk from a second-story window.

An examination immediately afterward found a compound comminuted fracture of the right patella, with wide separation of the fragments. The wound in the soft parts was about one-third of an inch long. The knee-joint was distended by much fluid. The left patella was also comminuted, but there was no wound of the soft parts. The fragments were small, numerous and widely separated. There was comparatively little fluid in this joint.

Under ether anesthesia the following operation was done.

Left Knee.—A four-inch transverse incision, made below the patella, opened the joint. The patella was broken into so many small pieces that all the fragments were removed. Little fluid was found in the joint, there having been very slight hemorrhage following the fracture. The patella tendon and the quadriceps fascia were sutured across the front of the joint with six silk-worm-gut sutures. A small wick of gauze was left in each side of the joint, and the skin was sutured with silkworm gut. The joint, before being closed, was flushed with sterile water.

Right Knee.—The compound wound was enlarged each way to the sides of the joint. The fragments were exposed, the joint opened and thoroughly flushed with 1 to 10,000 corrosive-sublimate solution and then with boiled water. Three of the fragments were of such size and so well attached that they were sutured with silk sutures. The other smaller fragments were removed. The skin was sutured with silkworm gut. One small wick of gauze was left at one end of the incision.

After-Treatment.—Both knees were immobilized upon posterior wire splints, with wooden side splints and straps, and aseptic-dressings applied. Three days later all wicks were removed. One week later all sutures in the skin were removed. Plaster-of-Paris splints were applied to each leg. Four weeks later the plaster was removed from the right leg. A flannel bandage was applied from the toes to the groin. A few days later the plaster was removed from the left leg and a flannel bandage was applied.

About seven weeks from the operation, passive motion was gently made at both knees. Union was firm of the sutured fragment of the right knee. Nine weeks from the operation the patient was discharged from the hospital with crutches, wearing flannel bandages upon both knees.

One year and four months after the operation the condition of the knees is as follows: Firm union of the right-knee fragments. Useful motion to a right angle. No pain. Practically no disability. As strong as ever. The left knee presents, in the entire absence of the left patella, a curiously flattened appearance. Motion of the left knee is slightly beyond a right angle. There are two little nodules of bone just under the skin near the outer side of the left knee. These are probably bits of bone left at the time of the oper-

ation, which if pressed upon are slightly sensitive. Otherwise the left knee is functionally as strong as if there were present a natural and normal patella.

This case is reported because of its unusual character.

Simple transverse fractures of the patella from a fall or muscular violence, with slight separation of the fragments, are best treated by non-operative measures.

Simple transverse or comminuted fractures of the patella, with wide separation of fragments, are best treated by operation and suture of the fragments.

Compound fractures of the patella, whether transverse or comminuted, whether with much or little separation of the fragments, are best treated by operation.

If the fragments of the patella are so greatly comminuted that the integrity of the patella cannot be restored, then an excision of all the fragments is indicated and a suturing of the strong quadriceps extensor fascia to the ligamentum patellæ and the fascia on each lateral aspect of the knee-joint.

Reports of Societies.

BOSTON SOCIETY FOR MEDICAL IMPROVEMENT.

JAMES G. MUMFORD, M.D., SECRETARY.

REGULAR Meeting, Monday, November 29, 1897, the President, DR. A. L. MASON, in the chair.

DR. C. F. WITHINGTON read a paper entitled

PULMONARY ABSCESS AND GANGRENE.¹

DR. F. C. SHATTUCK: Dr. Withington's interesting paper brings up several important points: in the first place, the complex condition which we are apt to encounter in any given case of gangrene of the lung so called. As he has clearly shown, abscess is very apt to be associated with gangrene; and the latter, after the separation of the slough, is liable to form an abscess. In fact, gangrene and abscess may be almost interchangeable clinical terms. Secondary empyema and secondary changes in the lungs, peritoneum or other parts may be complications or sequelæ. Another interesting point, especially interesting to me, which he brings out is the more favorable prognosis in cases of gangrene following pneumonia. My own experience, limited as it is in this line, quite coincides with Dr. Withington's accurate statistical facts as regards that point. Most of the gangrenes which I have seen get well have followed pneumonia, and it has seemed to me that pneumonia in drinking men was rather more apt to be followed by gangrene than pneumonia in temperate men, though as to that I do not feel perfectly sure.

The diagnosis of pure abscess of the lung seems to me a very difficult one, and the cases of pure abscess must be pretty rare. I passed an hour this afternoon looking over the records of my own cases at the Massachusetts Hospital. Among these were five set down as abscesses of the lung. When I came to look over the record of those cases, I was satisfied that at least two of them were nothing but empyema, the diagnosis of abscess having been written in by the house-officer or some one other than myself. For some years I now have taken pains to write the diagnosis myself.

¹ See page 220 of the Journal.