**PNEUMOCOCCIC ARTHRITIS FOLLOWING
ACUTE PNEUMONIA.**

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CASES of pneumococcic infection of a joint following acute pneumonia are rare, and the literature on the subject is certainly not voluminous. For these reasons the following notes may prove of interest.

The older writers on the complications of pneumonia mention "rheumatic joints" as sometimes following this disease. Quain and Osler both record the fact that arthritis may follow an acute attack of pneumonia. Stickler, of Philadelphia, collected records of 11,846 cases of pneumonia from various clinics, and found joint complications in about 800, that is, about 14 per cent. He does not indicate whether any suppurative forms occurred. In the *Epitome of the issue of the BRITISH MEDICAL JOURNAL* for June 13th, 1914, Buckley is quoted (No. 339) as collecting 172 records of pneumococcic arthritis, and as having reported a case of his own in the *Annals of Surgery*. The shoulder-joint was involved in a child 11 months old, and the trouble supervened upon left lobar pneumonia.

The notes of my own case are as follows:

History.

A male, aged 49, spent his 50th birthday in a nursing home convalescing from pneumococcic infection of the left ankle-joint following an attack of acute lobar pneumonia. He was a slim Frenchman who did not seem to be a good subject for pneumonia; he had had a previous attack three and a half years before when in East Africa, and had never felt well since.

When 25 years old he injured his left ankle-joint, and was unable to walk for several weeks. He sprained it again a few days before his present illness.

Condition when First Seen.

He was first seen on April 8th, 1910; he was then suffering from indefinite symptoms—namely, pyrexia (temperature 104°), chilliness, and rapid pulse (110) and respiration (30). He had been in contact with a bad case of influenza, and it was thought that perhaps he had contracted the disease. Next day physical signs pointed to pneumonia at the base of the left lung; he was very ill, but the attack followed the usual course, and the temperature fell by crisis on the seventh day. During the attack he complained of pain in the left ankle-joint, but there was no swelling or redness.

On the evening of the seventh day the temperature ran up to 101°, and the pulse was 108; he felt ill, and complained of great pain in the left ankle-joint, which was slightly swollen, red, and hot; the pain was lulled by local fomentation and aspirin, but he had a restless night.

In the morning (April 16th) the swelling had increased, and by the afternoon had reached nearly up to the knee-joint. The temperature was 104°, the pulse 120, and respirations 20. I decided to operate.

Operation.

Light chloroform anaesthesia was induced, and an incision made three-quarters of an inch behind the internal malleolus. A pair of dressing forceps was pushed through the incision in the direction of the posterior part of the ankle-joint, and several ounces of creamy pus escaped. A counter-opening was made behind the external malleolus, and a drainage tube inserted. The incisions were extended upwards on either side of the leg through the oedematous tissue, and the wounds and joint freely irrigated with 1 in 40 carbolic. The leg was dressed with sterile gauze.

After-History.

He passed a fairly comfortable night, and at 8 a.m. on April 17th the pulse was 98 and temperature 99°. He expressed himself as feeling much better and more comfortable. The inflammation had ceased to spread; there was, however, still a good deal of oedema round the ankle; this was most marked in front. The wound was irrigated with 1 in 60 carbolic and hydrogen peroxide twice daily and dressed as before.

On April 18th an incision was made into the oedema, in front of the ankle-joint, and more creamy pus came away. The wounds were irrigated and dressed as before; they looked more healthy. The growth obtained from the pus in an agar tube was pure pneumococci; an autogenous vaccine was prepared and 3 million injected on April 19th. Small doses (3 million) of vaccine were given every four days—five doses in all.

The patient made continuous progress and was able to get out of bed on May 12th. He left the home on June 13th.

Passive movement and gentle massage were used daily for three weeks after leaving the home. Passive movements of the joint were begun as soon as the joint wound had healed.

The patient was able to move his joint freely and walked only with a slight limp.

I heard from him a short time ago; he was big game shooting in East Africa; his health was excellent and his joint gave him no trouble.

Memoranda:**MEDICAL, SURGICAL, OBSTETRICAL.****ARTIFICIAL PNEUMOTHORAX AND SWIMMING.**

THOSE who have followed the details of the recent Thames tragedy, wherein William Mitchell was drowned while attempting to save the life of Sir Denis Anson, may be interested to know a fact about the former which rendered his gallant attempt more hazardous and his heroism more striking than is generally known. William Mitchell was the subject of an artificial pneumothorax.

He came under my care in January of this year with extensive tuberculous infiltration of the right lung reaching to its base, but with a clear left lung. I produced an artificial pneumothorax on February 2nd, and extended it on subsequent occasions till the right lung was completely collapsed, under a pressure of about +12 to 14 cm. of water, save for some adhesions on the inner anterior surface of the apex. Under this treatment his general condition improved, cough and expectoration ceased; he was able to return to work about Easter, and might ultimately have recovered completely. He continued at work, returning for refills every four or five weeks. He received his ninth and last injection of nitrogen gas on June 12th, and left with an intrapleural pressure of +14 to 18 cm. of water and his heart displaced 1 in. outside the left nipple line; this pressure must have fallen to near atmospheric pressure by the time of his death. His left lung was clear and unembarrassed, and he could undertake moderate exertions, such as those entailed in his employment, without any discomfort; he was, however, somewhat dyspnoeic on more severe exertion, and was well aware of this disability. That the presence of a pneumothorax must have greatly handicapped him in his gallant attempt there is no room to doubt—it is only when this fact and his knowledge of it is realized that the bravery of the act appears at its full value.

London, W.

CLIVE RIVIERE.

**FRACTURE OF A FLOATING RIB IN A
NONAGENARIAN.**

ON April 11th last, whilst watering the indoor plants, and proceeding from the landing down a flight of only three narrow steps to reach a back window, holding the watering-pot in one hand and the handle of the opening door in the other, I slipped and fell heavily on my back, the edge of a stair evidently coming in contact with the right side just above the sacrum.

My servants helped me up. Great pain supervened on motion, and I feared fractured rib; but deep inhalation did not increase the pain, whence I knew that the ribs encasing the lungs were all right.

I remained in bed the next day, and felt a painful jolting on moving my body. The following day I got up, supported by a belladonna plaster and belt around the injured part. Whilst sitting up I remained quite easy; the pain on moving and turning sides in bed, with the bone jolting, gradually lessened. At the end of three weeks I had quite recovered, and could bear pressure well on the injured part, which on examination disclosed a callus about two inches from the point of the upper floating rib. I never before heard of such a fracture, and the fact that I was born in 1821 adds interest to the fact that bony union occurred in three weeks.

Dulverton.

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AT the annual meeting of the American Medical Association, held at Atlantic City, June 23rd to 26th, Dr. William Louis Rodman, Professor of Surgery in the Medico-Chirurgical College of Philadelphia, was elected President. The next meeting of the association will be held in San Francisco in June, 1915.

THE United States District Judge of the Southern District of Iowa has (says the *Medical Record*) declared unconstitutional, and therefore null and void, the law passed by the last General Assembly of Iowa providing for the sterilization of certain criminals. This decision is based on the ground that the penalty is in violation of the constitution which provides that cruel and unusual punishment should not be inflicted.