Dr. Hazen also spoke about the glands, regarding recurrences in the neck or wherever else they may be. I must say that when we have buried the radium directly into the mass we have seen the glands disappear, but they come back in the opposite side just as quickly as you make your application. What good you accomplish I do not know. We are making the patient comfortable and carrying them on a little longer. What more, I do not know.

He also spoke about radium and X-rays' not being superior to each other. I said one was good for one thing and one for the other. I agree with him when he says the surgeon should see them first. There is not a case accepted by me until the man who refers them is known by me personally and that we know what he is doing. That is one thing we are doing: we try to keep out of trouble.

I do not want you to think the Coolidge tube is not an efficient instrument. It is wonderfully efficient. I said before that every man who uses the tube should be licensed to use it; that the general practitioner should not be allowed to do it, if there is any way to keep him from it.

I was telling a gentleman downstairs this morning of a case referred to me from Texas not long ago, of a doctor who was in one of the Northern clinics and heard a great deal about the tube. He got a small portable outfit. The patient was referred to me in about two and a half months after he had started to treat her for a large uterine fibroid. Gentlemen, it was the most horrible mess I have ever seen in my life. All over the lower abdomen was a slough as big as a soup plate. This man had taken the tube, used it absolutely open, without any filtration whatever, and had given that patient one-hour sittings. That is the plea I want to make, gentlemen.

AUTHORS' ABSTRACTS

Surgery, Gynecology, Obstetrics and Genito-Urinary Diseases.

Regeneration in Peripheral Nerves: An Experimental Study. Edwin G. Kirk and Dean D. Lewis, Chicago, Ill. Bulletin of the Johns Hopkins Hospital, Vol. XXVIII, No. 312, February, 1917, p. 71.

A second series of experiments confirms the authors' former conclusions as to the superior value of tubulization with fascia (lata) in the repair of nerve-defects too large to permit of direct approximation of ends except with the employment of undue tension on the nerves,—a condition predisposing to failure. The use of *auto-transplants* of fascia is urged, as they are viable, and all inflammatory-absorptive reaction and consequent cicatrization are thus avoided.

As each of this series, representing nerves in every stage of regeneration from one day to fourteen months, was examined microscopically in complete serial section, ample opportunity was afforded for study of post-traumatic regeneration. The first stage consists in a rapid proliferation of the delicate neurilemmal sheaths (of the nerve fibres) which become protoplasmic, while their nuclei (few in the resting stage) increase enormously in number. Thus the neurilemmal sheaths become converted into protoplasmic

bands, which grow from both proximal and distal nerve stumps into the coagulated fibrin-serum, which has meanwhile filled the uniting fascial tubule, or, in case of direct approximation, cemented the ends. These neurilemmal bands from proximal and distal stumps unite and finally constitute complete protoplasmic tracts, along which the regenerating nerve fibres proper (axis cylinders) from the proximal stump grow, eventually reaching the empty neurilemmal canals of the distal stump. While the sheaths (bands) grow from both stumps, all efficient regeneration of nerve fibres proper (axis cylinders) is from the proximal stump only.

Raymond's Disease. E. S. DuPuy, Beckley, W. Va. The West Virginia Medical Journal, Vol. XII, No. 8, February, 1917, p. 279.

Case No. 1.—Young man, 18 years old, in fairly good health. Began with neuralgia of the arms and legs, which ended with swelling and asphyxia of some of the fingers and toes. The affected parts returned to their normal condition, but finally grew worse and the asphyxia resulted in gangrene. Some fingers and toes were amputated. His condition improved for a time, but after several months he had another attack and died.

Case No. 2.—This was a woman. The asphyxia was marked. Skin was cold and blue. She was only seen once, so the outcome can not be stated.

Case No. 3.—Male, aged 27. Complained of itching and pain in toe six years ago. Little finger on right hand began to itch; turned red, blue and black in order. Was amputated at distal and middle phalangeal joint. Two years later had some trouble in fourth toe on left foot. Had it amputated. Three months ago end of small toe on left foot began as did adjoining toe two years previously. Was in the hospital at the time and had local treatment, which temporarily relieved it. Later he was compelled to return to the hospital, same little toe giving him trouble—red-bluish in color and small ulceration on ball of toe. Painful to touch. Complaints of itching and pain and not much swelling in toe. Mother died of same trouble. In her case it had extended above the knee.

The diagnosis is made by the following: the asphyxiating condition of the tissues precede gangrene; the fingers and toes are mostly affected; sometimes the ears and nose; and gangrene is symmetrical. The cause of Raynaud's disease is not known, and the pathology is still obscure. The treatment is unsatisfactory. Frost bite most resembles the disease, but it differs from all forms of gangrene.

Fascia and Fat Transplantation. Dean Lewis, Chicago, Ill., Surgery, Gynecology and Obstetrics, Vol. XXIV, No. 2, February, 1917, p. 127.

Fascia is an ideal material for transplantation. The amount is relatively inexhaustible. Enough fascia can be removed for any plastic work that has to be undertaken without interfering with the function of the part from which it is removed. Fascia may be used to form tendons. In repairing extensor tendons, strips of fascia should be used; in repairing defects in flexor tendons it is