

Doctor Pierson would have elaborated, had space permitted.

Carefully controlled heliotherapy, preferably natural sunshine—the various lamps being only a substitute—is of definite value even during the more acute phases of lung abscess. In the chronic stages of all the non-tuberculous lung suppurations it is of marked benefit. The direct effect on the lung itself may not be marked, but the general improvement in the patient's condition is usually such that if surgical measures are indicated, the attending shock is greatly minimized. This type of therapy is particularly neglected by surgeons who have not the opportunity of frequent contact with a chest consultant.

In chronic pneumonia and bronchiectasis the "radical clearing up of upper respiratory infections" is fundamental and frequently neglected. One can have but little hope of a permanently successful result if this is overlooked.

Drugs offer little except symptomatic relief in all of these infections. However, the time-honored creosote is often of marked value in chronic pneumonitis. It is best given as guaiacol carbonate in 5-grain capsules as often as every two hours. Occasionally this is not well tolerated—then the soluble potassium guaiacol sulphate in the same dosage is usually accepted. This sometimes clears up basal râles of months standing.

For autogenous vaccine we are using the "selective pathogen" method of preparation (culturing a sample of the carefully collected fresh sputum in a sample of the patient's own blood). Theoretically, those organisms will grow most abundantly against which the patient has the least resistance. Practically it seems to work. This method has given us decidedly better response, as judged by the focal reaction, during the three years it has been used.

In closing, I would make a plea for the use of surgery, not as a last resort, but judiciously, in properly selected cases, after careful medical supervision alone, has failed to achieve a satisfactory result.

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ROBERT L. CUNNINGHAM, M. D. (506 Medical Office Building, Los Angeles)—For many years, emphasis was laid upon the early diagnosis of pulmonary tuberculosis and the tendency was to designate as tuberculous conditions which possibly were not really such. This was amply illustrated by the large number of men rejected for service in the army and navy during the war as being tuberculous, who were later found to have some other pathological condition. The prevalence of influenza and kindred infections since 1918 has also given rise to a host of pulmonary conditions which were rare or unrecognized before. These circumstances, together with new refinements in the technique of study and more critical observation, may account for the increasing frequency with which non-tuberculous pulmonary suppurations are now demonstrated and for the many excellent papers appearing upon this subject within the last two or three years. I have read with interest many splendid contributions but can recall none covering the field more adequately than does this presentation by Doctor Pierson.

In this paper, there is material for an extensive monograph. The one paragraph upon foreign bodies in the lung might well be expanded to an interesting chapter, while aspiration, pneumonia or pulmonary embolism offer equally inviting opportunities. Doctor Pierson has shown great restraint, which, I trust, simply means that he intends to treat those questions more fully later.

A diagnostic point, which has seemed to me of value in hinting at intrapulmonary abscess rather than pneumonia or empyema when differentiation has been in question, is the presence of pain referred to the shoulder or acromion process on the affected side. It always makes me suspicious because of the frequency with which I have found it in proven cases of pulmonary abscess but seldom elsewhere.

Under the treatment of abscess, Doctor Pierson does not mention the injection of lipiodol either

through the bronchoscope or by intratracheal instillation. We have noted marked benefit following its use, though in suspected tuberculous abscess, it is to be shunned. Otherwise the therapeutic measures described seem complete. The importance attributed to postural drainage is most gratifying; it is a measure of the greatest importance and one too often neglected. My limited employment of vaccines has given me no enthusiasm for that mode of treatment, but I shall make further trial of it because Doctor Pierson has found it helpful.

Those who suffer from any of these types of pulmonary affection need all of the help available in order to render life tolerable and such work as Doctor Pierson has given us is encouraging and will stimulate us to better efforts of study and more thorough trials of the various methods of treatment indicated in this splendid report.

CLINICAL NOTES, CASE REPORTS AND NEW INSTRUMENTS

THE RECONSTRUCTION OF A COMPLETELY DESTROYED AURICLE*

CASE REPORT

By HARRINGTON B. GRAHAM, M. D.

San Francisco

THE opportunity of reconstructing the auricle occurs so infrequently that the operator seldom has a chance to learn how to improve his technique from personal experience. He must look to the description of the operation by others and so far the errors one may fall into have been very casually dealt with. I am attempting to describe two cases, one of my own, and the other by Dr. George Pierce of San Francisco, quite differently done, both of which could have been improved on by experience.

TECHNIQUE

The important factors involved in the operation are:

1. The tissue used must be in appearance and consistency similar to the original ear.
2. The support must be sufficient to keep the new tissue erect and away from the skull.
3. The new ear should be as thin as it is possible to make it.

If the tissues behind the ear have been uninjured, they are available for the reconstruction and even the hairy parts may be used, as they may be folded back so as to bring the hair onto the posterior surface, where it may be easily kept short. If this tissue is not available, the whole ear must be reconstructed from the skin of the chest, abdomen, or arm, none of which has the appearance of the original ear and can in no wise be as satisfactory as the scalp tissue.

The support may be celluloid, in which case there is a grave chance that it may later on be extruded. Of course, its thinness and malleable quality is a great asset. Personally, I prefer cartilage and have found the nasal septal cartilage satisfactory. The assertion that this is absorbed more frequently than is rib cartilage, has not been found to be true in my nasal plastic work;

* Read before the Pacific Coast Ophthalmological Society, Spokane, Washington, June, 1927.



Third stage. Lower border stitched to lobule

Second stage. Upper border stitched to anterior portion of canal

Fourth stage. Completed ear

either may be absorbed, the determining factor being unknown to me. Gillies has suggested using rib cartilage in order to be able to excavate it so as to provide a support the shape of the former ear, but this does not appeal to me, as it is a difficult task and the shaping might increase the tendency to absorption. It is hard to get a piece of rib cartilage as thin as septal cartilage, and this is a very important factor, as far as the cosmetic appearance of the ear is concerned.

The thinness of the new tissue will depend to a great extent upon the position subcutaneously of the transplant. If it is buried deeply in the tissues, the result must be a thick ear. A superficial position is a difficult one to obtain, but will pay the operator for his pains. Any tissue taken from the arm or chest must be thick, looking like a piece of putty when transplanted. However, time modifies its appearance so that under certain circumstances it may be permissible to use it.

CASE REPORT

My case was injured in a railway accident, the patient losing all but a portion of the lobule of the left ear. The tissues on the scalp were undamaged so that I could use the non-hairy parts for the reconstructed portion. My first step was to transplant a piece of septal cartilage the shape of the sole of a shoe to the subcuticular tissues posterior to the defect. I placed this directly behind the defect instead of above and behind, so that when I brought my tissues forward I did not have enough support to keep them high enough. Any cartilage either from the nose or rib, used to keep the soft tissues up and away from the head, should lie, by preference, in the upper one-third of the completed ear. It is difficult to get enough nasal septal cartilage to fill the demand, so that the lower portion of the lobe may have to be disregarded.

After leaving the cartilage in place for a month, I made a circular incision to the hair line, starting at the upper anterior part of the old ear. This incision was carried to the periosteum and the skin thus outlined, including the cartilage, was raised and folded in such a way as to have the upper border of the ear covered by a continuous layer of skin. The anterior portion was now sewed down to the tragus, and the defect on the scalp remedied by the customary undermining, reduction in size of the opening, and a skin graft taken from the leg, which was brought well up onto the back of the new flap. Were I to do another I should not fold the upper edge back, as in this case, but would use it entire, placing a graft over the whole posterior surface. This flap, if the cartilage were prop-

erly placed, would be quite sufficient to form a new ear without any further addition.

After another month the lower part was incised, carried forward and sewed to the freshened lobule, another graft being placed posteriorly. A few minor operations were done to smooth things out, and an attempt made to stiffen the upper border somewhat by the introduction of celluloid. This should not have been necessary.

Doctor Pierce proceeded quite differently with the reconstruction in his case. He transplanted the rib cartilage, placing it in position subcutaneously through a small incision above the ear. After six weeks a complete incision was made, outlining the new antihelix, which was then raised from the periosteum and a skin graft placed so as to cover the whole denuded surface, with stent in the center. The edge was then sewed back into its place of origin and again freed after ten days. He then brought a tube pedicle flap from the chest up to back of the ear and draped this over the new edge, forming a new helix, which is quite effective. This procedure enlarges the ear so that it is fully as large as the other, and when completed will be nearly the same shape.

The ear that I constructed is considerably smaller than the normal ear, due to the fact that I did not carry my incision high enough on the head, that I folded too much tissue back in order to get a smooth border, and that my cartilage was not placed high enough. All of these errors should be avoided in future work. The assertion of one author that no reconstructed ear is worth while is certainly a false statement, and the time is coming when we will be able to replace a destroyed ear by one which is nearly the equal of the original. Concentrate this work in the hands of a few surgeons and the technique will soon be developed satisfactorily.

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PARAPHARYNGEAL ABSCESS WITH COMPLICATIONS

CASE REPORT

By ROY F. NELSON, M. D.
Oakland

ABSCESSSES of the deep fascial planes of the neck can give rise to such grave complications that they are always ominous. This case ran the gauntlet of complications except for thrombophlebitis and mediastinitis, which are nearly always fatal, and his recovery seems worthy of record. Endoscopic surgery succeeded after external attack had failed.

The patient was transferred to the bronchoscopic clinic of the department of otolaryngology