

Indeed, in Case 1, in which the larynx itself showed such marked improvement, the temperature fell an average of 1 degree F. shortly after the oil was discontinued.

It should be stated that, in general, the patients said that their throats felt somewhat better after each treatment. Except in Case 1, this was transitory, however, and in two cases, 5 and 7, injection of the superior laryngeal nerves was necessary to relieve the pain.

CONCLUSIONS

1. Intralaryngeal applications of a 10 to 20 per cent. solution of chaulmoogra oil in olive oil may relieve the dysphagia of an advanced laryngeal lesion entirely, but such relief has followed its use in only one out of our seven cases. Slight temporary relief occurred in every case.

2. On the other hand, the general condition of a febrile patient may, possibly, be unfavorably influenced by such treatment.

3. Caution should be used in the laryngeal treatment of tuberculosis with chaulmoogra oil until more accurate data are in our possession concerning its local and general effects.

CHAULMOOGRA OIL IN THE TREATMENT OF TUBERCULOUS LARYNGITIS

FRANK L. ALLOWAY, S.B., M.D.
AND
JAMES E. LEBENSOHN, M.S., M.D.
CHICAGO

Since the publication of Lukens' paper¹ on the use of chaulmoogra oil in tuberculous laryngitis, we have introduced this treatment in the Throat Clinic of the U. S. Veterans' Hospital, Maywood, Ill. Of the patients in this hospital, from 300 to 400 are suffering from pulmonary tuberculosis in some of its various stages. In the last four months, forty cases of tuberculous laryngitis were selected for treatment with chaulmoogra oil. Our technic differs from that of Dr. Lukens only in these respects: A special laryngeal syringe is used; the patients are treated daily, and only the 20 per cent. solution of chaulmoogra oil in liquid petrolatum is employed.

The cases handled fall into four groups:

GROUP 1

The largest number treated were those with distinct but not extreme laryngeal lesions. These patients had generally been hoarse for months previous to treatment, and had various degrees of discomfort, ranging from a vague sense of pain referred to the throat to definite dysphagia. In these cases the symptoms were controlled by the intralaryngeal injections of chaulmoogra oil, though in the severer cases some vestige of discomfort maintained itself. The dysphagia is often relieved in a few treatments, but the condition of the voice has been found to be generally but slowly affected.

One remarkable case of this group should be cited:

J. J. S. had dysphagia and hoarseness for more than six months. His general condition was fairly good, but his throat caused him much distress. The first attempts at swallowing were exquisitely painful, with excruciating radiations to the ears. After the first few swallows the acts of

deglutition became somewhat more tolerable. The objective findings consisted chiefly of patches of ulceration and infiltration involving the posterior two thirds of both cords; pale infiltration of the aryteno-epiglottidean folds, particularly the right, and sprouting granulations in the interarytenoid region. This case was the "chorditic" type of tuberculous laryngitis, in which the arytenoids had become secondarily involved. For the first three days of the chaulmoogra oil treatment the patient could notice no change. On the fourth and fifth days, improvement was admitted. He remarked then that his voice felt stronger and clearer. On the eighth day he felt entirely free from discomfort, his appetite had greatly improved, and he spoke without effort. Since then his lesions have progressively resolved, and his laryngeal condition has improved in every way.

Some cases that at first failed to respond satisfactorily to the chaulmoogra oil treatment went along excellently after one or two applications of Lake's pigment² had been given and the chaulmoogra oil treatment continued. Control of pain was secured in moderately advanced laryngeal lesions even in cases of advanced tuberculosis that went on to a fatal issue. Occasionally the anodyne effect of orthoform had to be used as an adjuvant. In none of these cases was cocain used.

GROUP 2

The second group of cases included those of early tuberculosis in which the laryngeal symptoms were only a subjective sense of tickling or irritation in the throat, associated with slight hoarseness or weakness of the voice. The physical signs revealed by the laryngoscope were slight. These cases often cleared up surprisingly after a few treatments. Occasionally the pain would recur after the treatments had been discontinued, but would then be as quickly controlled as originally.

An interesting case was one of pachydermia laryngis. Hoarseness and weakness of the voice had extended for many months. With the first few treatments a remarkable improvement in the voice occurred. A further strengthening of the voice took place after tonsillectomy. The case was pronounced nontuberculous by the medical department.

GROUP 3

The third group included those of advanced tuberculosis with advanced laryngeal lesions, that had previously not been benefited by the usual treatments. Chaulmoogra oil likewise was not able to afford them any lasting comfort. The dysphagia complicated their other miseries till the inevitable end.

GROUP 4

Chaulmoogra oil treatment was also carried out in cases of chronic laryngitis dependent on nasal conditions, but without any particularly beneficial results.

A few cases of syphilitic laryngitis that were characterized by dysphagia were treated with the oil at the same time that vigorous antisiphilitic treatment was being given. The chaulmoogra oil did not seem to be of especial value in these cases.

It perhaps deserves mention that a skin lesion of the nose in a tuberculous patient pronounced lupus by the dermatologists was treated with chaulmoogra oil with gratifying results. The lesion, when first seen, was of six weeks' duration, and had become progressively more tender and prominent. After a week's use of

1. Lukens, R. M.: Chaulmoogra Oil in the Treatment of Tuberculous Laryngitis, *J. A. M. A.* 78: 274 (Jan. 28) 1922.

2. The formula introduced by Lake consists of lactic acid, 50 gm.; liquor formaldehydi, 7 c.c.; phenol (carbolic acid), 10 gm.; distilled water, sufficient to make 100 c.c. The phenol acts as an anodyne, and pain rarely lasts more than a few minutes. Cocain is only occasionally needed for the first few applications when the throat is unduly irritable.

chaulmoogra oil, all discomfort had disappeared and the lesion showed marked regression. The patient is still under treatment.

CONCLUSION

Chaulmoogra oil, we believe, should have a definite place in the treatment of laryngeal tuberculosis. It is useful in the majority of cases, though in the treatment of laryngeal tuberculosis as a whole it cannot entirely replace the other forms of medication, such as the cocain-epinephrin spray, orthoform, menthol and Lake's pigment, superior laryngeal nerve blocking, epiglottidectomy, etc.

Some may be skeptical of the value of chaulmoogra oil, as employed in these cases, because the mechanism of its action is not clear. It may be true that the oil has no specific effect, but its beneficial action can be perhaps adequately explained by its detergent, anesthetic and counterirritant properties. Barwell³ says: "Intratracheal-oil injections act in the same way (i. e. like steam inhalations and oil nebulae) in relieving dryness and soreness of the throat, and I have found them very useful in cases of advanced ulceration, reducing inflammation and relieving discomfort." He employed a 1 per cent. solution of menthol in liquid petrolatum, but from both theoretical considerations and clinical experience it would appear that chaulmoogra oil should act more efficaciously.

3159 West Roosevelt Road.

Clinical Notes, Suggestions, and New Instruments

A SIMPLE MECHANICAL STAGE

PHILIP REICHERT, RAY BROOK, N. Y.

The apparatus here described is a simple, efficient and inexpensive mechanical stage for the use of students practicing microscopy.

The frame is of wood, well smoothed with fine sandpaper, and glued at the corners. Its outside dimensions are 3 by 4 inches. On the right cross-piece a vertical hole receives a handle made by bending heavy wire into shape. A large opening has been drilled horizontally beneath, making the wire accessible from the side so that a thread may be wound about it by turning the handle.

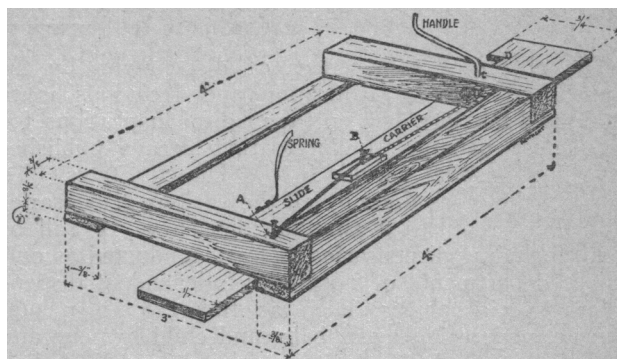
The slide carrier imitates those on the expensive machines. It is made of wood $5\frac{1}{2}$ inches long, $\frac{1}{8}$ inch thick and $\frac{1}{2}$ inch wide, except for a projection on the right side which makes the width on that side $\frac{3}{4}$ inch. This projection receives the slide; a flat spring cut from thin brass $\frac{1}{8}$ inch wide and 2 inches long is placed at a suitable distance on the left to hold the slide against this projection. The spring is fastened to the carrier by means of two wire brads; it is wise to hold the thin board in a vise while the brads are being driven so as not to crack the wood.

The post *B* is set on a block 1 inch long, $\frac{1}{2}$ inch wide and $\frac{1}{8}$ inch thick. The left margin of this block must be $2\frac{1}{2}$ inches from the left margin of the slide carrier. A rubber band is stretched from this post to the post *A*. Placed diagonally as shown, it tends to draw the slide carrier to the left, and at the same time keeps it tight against the frame so that the slide will ride smoothly and not wobble.

The action of the rubber band is opposed by a heavy black thread which is fastened to the post *B*, the other end going into the horizontal opening in the right cross piece, and winding about the lower end of the handle at *C*. The handle should have a radius of about 1 inch. It is evident that

rotation of the handle will cause the slide carrier to move from left to right or reverse.

The frame is mounted on the stage of the microscope and held in place by means of a heavy rubber band or a screw clamp such as may be purchased at any hardware shop. When one horizontal excursion is complete, the clamp is loosened, and the frame is moved either forward or backward and



Simple mechanical stage.

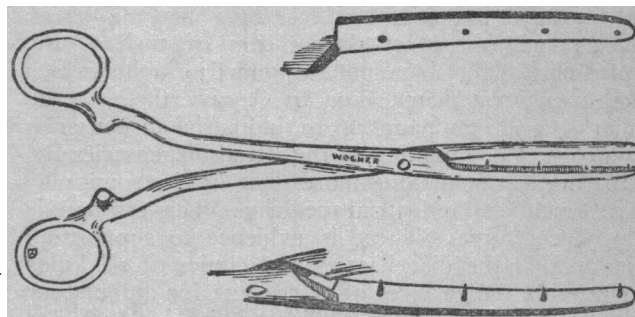
again clamped so as to permit a new part of the field to pass beneath the objective.

The cost of the materials is approximately 25 cents, and the apparatus can be easily made in less than an hour. In practice, it permits steady and accurate control of the movements of the microscopic field.

A NEW MUSCLE CLAMP

JOSEPH L. DECOURCY, M.D., CINCINNATI

This muscle clamp was adopted primarily for muscle section in thyroidectomy. The requirements of such a clamp are to exert a hemostatic action on the vessels of the muscle and at the same time to hold the muscles and fascia in a firm grasp without crushing the tissues. The disadvantage of the clamps thus far used, in my opinion, has been that their crushing action not infrequently leads to tissue necrosis and favors infection and adherent scars.



New muscle clamp.

The clamp consists of a smooth surface with four sharp protrusions, as shown. The protrusions insert themselves into the fascia and muscles and hold them firm, while just sufficient pressure is made from the smooth surfaces of the clamp to close the thin walled vessels without making undue pressure on the other tissues.

A Prescription.—Filling a prescription is not the same as buying a suit. This the customer realizes. The man who has been cheated on furniture or wearing apparel has pretty much himself to blame, for he should have some knowledge of what he is buying. The same is not true of medicine. The customer trusts, implicitly, to the druggist; he expects his prescription to be filled by one who knows how to compound medicine and he expects to receive the best drugs.—Presidential Address, W. Gay Clark, Tennessee Pharmaceutical Association.

3. Barwell, Harold: Diseases of the Larynx, Oxford University Press, 1907.