

ten cases developed pneumonia, and two others were attacked twice in this (October–November) epidemic, an interval of about three weeks occurring between each attack. On the other hand, these two and the remaining seven cases were mild, and occurred in households where the other victims developed a severe form of the disease. As a further instance which might prove helpful in relation to this question, we would mention the case of a household of six persons, four of whom developed the disease in a rather severe form; the remaining two, who were attacked during the summer epidemic and were the only members of the family affected at that time, escaped entirely.

Conclusions.

Our conclusions are few, but so far as our experience goes they are, we venture to think, soundly based.

1. Prompt isolation, when it can be effected, as in the cases which occurred among the prisoners, is undoubtedly the best means at our disposal for preventing spread. And as the result of isolation is evidence that the disease is spread by personal contact, all persons coming into contact with cases, whether isolated or not, ought to adopt some means of personal protection. For this purpose the wearing of masks would appear to be very effective.

2. At the first warning of an epidemic schools and other places of congregation ought to be promptly closed.

3. With regard to the question of protection being offered by previous attacks of the disease, the evidence at our disposal would seem to justify us in forming the conclusion that a previous attack does confer in most cases a certain amount of protection.

4. There was strongly impressed upon us the urgent necessity of organising some service of domestic help (quite apart from actual nursing) in all cases where the mother of the family is stricken with the disease. It is sad to see the mother suffering with, or convalescent from influenza (and our remarks, of course, apply to other diseases also), but compelled to attend to the needs of her young family, simply because there is no one else to do the work. We venture to think that some of the feminine activity and organising power, which is now being released from war services, might well be turned in this most essential direction.

We are indebted to the Directors of Convict Prisons for permission to publish this paper.

ON MYALGIC PAINS.

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THE phenomena of disordered states of muscles or fibrous structures constitute one of the most prevalent and puzzling causes for frank or obscure distresses or disablements. They occur in those otherwise in excellent health or while convalescing from almost any form of acute or chronic disease or injury. Fibromyositis—which is perhaps the best name offered—is often recognised as such, or may be so cunningly interwoven with other factors as to escape separate blame or suitable treatment per se.

Oftentimes the most carefully devised remediation for associated or original conditions proves inadequate to relieve this feature. Hence the experience of one on whose attention it has been forced by personal suffering, and who therefore sought diligently for means of relieving himself and clients, may prove helpful.

I.—*Fibromyositis and its Disabilities.*

Fibromyositis is one of the most common, disabling and often distressing of ailments, appearing suddenly and insidiously, remittingly or intermittently. It forms the basis of, or clinical background for, a vast variety of morbid states both physical and mental. The condition is not always painful, nor even tender, but capable on aggravation of exploding into torture and mental anguish. It obscures and befogs the clinical issue so often as to act as a serious handicap.

Among the distresses or disabilities referable to fibromyositis are: headaches, backaches, lamenesses, restriction of movement (often not recognised as pain states), deformations, faulty attitudes, intestinal disorders, even appendicitis.

They often accompany or follow, seeming to be the effects of, acute disorders of varied origins. Sometimes there is osteophytic proliferations with decalcification of vertebrae, but even then treatment can effect cure. Referred pains, while due to particular causes, are many times aggravated by fibromyositis.

The means of cure lies in two chief directions, dietetic or metabolic regulation, and the resources of reconstructive or bio-kinetic measures. Of these, the latter are most prolific of relief and the former for removing the underlying causes and staying progress. Indeed, if a fibromyositis has progressed far enough there is only one means of radical emancipation—viz., by revision of conduct through reconstructive personal hygiene. Especial attention should be focussed upon the skin and muscles. My experience leads me to believe that without a thorough marshalling of reconstructive, especially manipulative, measures rheumatic states will persist or recur. Sometimes counter-irritation is necessary. The colon should be irrigated with much water, 4 or 6 gallons, in and out, and in and out again, till the whole gut is clean, repeated every other day for two weeks. To this it is well to add sodium chloride and sodium bicarbonate daily for four or five days.

So common a condition deserves attention for the reason that, in spite of its universality, it too often escapes recognition; many contradictory conceptions obtain as to its nature; many errors as to phenomena, progress, significance; also as to economic means for relief and cure.

Diagnosis, obscure in many definite clinical entities, frequently reveals the coexistence of a fibromyositis. Whether the derangements exhibited be sensory, static, or inflammatory, no treatment for the overshadowing disorder will be successful until the accompanying fibromyositis process is dealt with both as a possible source of origin of the pain and as a contributing cause of distress and disability. Tuberculous lesions often exhibit reflex or spastic muscle densities, as pointed out by Pottenger. These are, in my opinion, fibromyositic in character. So of diverse sorts of lamenesses, whatsoever other condition be present.

A fibromyositis is often the essential process when symptoms point reasonably toward more serious diseases or disorders. A fibromyositis may be acute, and, when prolonged, may be accompanied by moderate febrile reaction, so large and complex are the sources or origins. It is then obvious enough, as in a sharp attack of myalgia of the lumbar muscles, the scapulae, the pectorals, muscles of the scalp, neck, and the like. The frequently recurring tenderness of the erector spinæ muscles, indicating irritation in the rami, are, in my opinion, of the nature of fibromyositis. To be sure, they point to irritations in the spinal subcentres, and these must be relieved in order to cure associated miseries or diseases.

Fortunately, manipulative treatments work both ways, not only dissipating the local tenderness but also reflexly stimulating the vaso-motor action in the subcentres, and thereby contributing to the nutrition in the disordered peripheral locality.

II.—*The Differentiation between Neuralgia and Myalgia.*

We should differentiate between neuralgia and myalgia. In neuralgia painful points are found in the nerve, at outlet or in continuity; where nerves emerge from bone especially. After being relieved there is no further local tenderness. In myalgia pain is located in the body of the muscle, especially at its thinnest part, where most expanded, and is always distributed over a larger area than is neuralgia; also tenderness persists between attacks. A zone of hyperæsthesia or hyperalgesia exists which does not parallel the nerves. Myalgic points or areas correspond to where muscle blends into fibrous structure or tendon. Myalgia often simulates angina pectoris (Peritz), acute gastritis, especially when the belly is distended with gas. Also it simulates cholecystitis, appendicitis, sacro-iliac disorder. A "sciatica" is often triumphantly detected, which in reality consists of fibromyositis in the muscles of the gluteal region, especially of the brim of the pelvis; also of the small lumbar attachments. Many lamenesses arise in muscle tenderness in the glutei and their fibrous attachments, only to be detected by expert finger explorations; they are curable by persistent manipulation readily enough.

Induration, infiltrations, thickenings are exhibited, giving evidence of chronic myositis at points of lodgment. Certain

stages are shown: (1) swelling, elasticity, sometimes glossiness of skin; (2) boggiess, cedematous states, a doughy feeling; (3) densities, rigidities, spasm, passing with age into ligament-like cords, which are tender to touch. These cord-like, stringy structures are characteristic of fibromyositis. They also are evidences of disturbed states (reflex spasm from a peripheral lesion) in paravertebral structures. In late maturity certain muscle fibres are replaced by connective tissue, and in these tendernesses are common, due to compressions of sensory nerve terminals when movements are made.

The two earlier stages are most sensitive. They likewise come and go—i.e., are less or more severe—but rarely intermit entirely so long as the condition lasts. In older forms of fibromyositis passive tenderness, as well as active sensitiveness, the organism becomes so adjusted that the sensory responsiveness sinks below the threshold of consciousness; hence is operative in causing vague, unidentified distress, weariness, sleeplessness, achiness, infirmity, atrophy, decrepitude, and mental depression or confusion. There may be no active sensory response; the awareness may be subordinated and only brought out by carefully directed tactile explorations, or by movements active or passive, and especially when fatigue or exhaustion coexists.

Favourite seats of myositic thickenings are the head (scalp), neck, in and about the knee, hip, shoulder, and ankles, wherever muscles overlap; inside of the elbow; insertion of the pectoralis major, the latissimus dorsi into humerus, the intercostals, of the abdominal wall, the crest of the ilia, the glutei. Indeed, the buttocks are a fertile ground of fibromyositic complexities variously named, but always hindering locomotion.

III.—*Diagnosis and Treatment.*

The means of diagnosing latent forms of fibromyositis is largely by expert tactile apperception (an educated fingertip). The relief and cure, as said, lie in two directions—digestive regulation and the varied resources of reconstructive measures. Especially useful is heat, pressure, manipulation, separation of fibres by hand, or counter-irritation by blistering or cautery. Indeed, if the condition has lasted long and complications have progressed far enough there is only one reliable means of emancipation—viz., through the resources of revised conduct, personal hygiene, improving habits, notably by attention to skin- and muscle-training, passive and active.

The point I wish to emphasise here is that whatsoever be the pathologic process underlying most protracted or subacute maladies there frequently co-exists forms and degrees of fibromyositis complicating matters and producing distress or disablement or both, which demands relief per se. When once the fact becomes realised and the main diagnosis is correct, but there is superadded another cause for the pain or disability and the clinician devotes his attention equally to both, then his duty to the patient is by way of fulfilment.

It is a common experience with me to meet a case in whom dissatisfaction has arisen with former sound service, conditions which, however, so puzzled the physician that he confidently asserted the original one persisted. As a graphic example:—

A vigorous young man consulted me for what he said his physician, an admirable exponent of the best ability, told him was a pleurisy, which at any moment might grow worse, and that it was dangerous for him to work. The man, feeling absolutely well except for a pain on taking a long breath, and sadly needing to earn money to live, determined to seek other advice. There certainly was no pleurisy, and there certainly was a point of fibromyositis along a rib and a local tenderness. This I promptly dissipated. He could then breathe with no pain, and returned to work immediately.

Another, a master mason, whom the foreman on some repairs on my house wished to work on the job. This man rested under the medical ban of a subacute appendicitis for 10 months. This proved to be merely fibromyositis of the rectus abdominalis, and disappeared overnight under iodine treatment and strapping. He did his full work from that moment.

The most puzzling problems are those in which an obvious fibromyositis refuses to be cured, although much relieved, and other obscure phenomena persist. In most such instances there may be assumed a chronic irritation in the cell bodies of the cord from which the vaso-motor nerves arise which supply the distressed part. The form

is often a protective spasm, usually detectable as a cord-like mass in paravertebral muscles. A permanent cure may be effected by freezing the spinal area two or three times, or by exerting some powerful mechanical stimulus to the part whereby adhesions are freed and the nerve outlets (gray rami) resume their functions unhindered.

Of the many forms of reliable treatment some are described later. In any event some expert (really expert) manipulation serves as an efficacious, almost necessary, adjunct. The main object is to relax the over-tension (protective spasm) in the affected structure, to diffuse the local stagnation, and to separate and stretch the muscle fibres from centre to affected locality.

In most instances manipulation should be applied as nearly as possible to the origin of the muscle, where the main nerve enters the mass, not neglecting the belly or mid-portion, nor the insertion. Hand treatment should aim to empty the spastic muscle of vitiated lymph and blood; should be applied not too long at a time, two or three minutes with intervals to let the patient rest from the pain induced, and then repeat two or three times; total, five or eight minutes. They should be again done on the same day or on successive days, being guided by the degree of "soreness" produced.

In the case of tonic muscle-spasm, often large and sudden, forcing the part first in one direction then quickly back again, will throw a long disused part first out of its false position, then back into a normal one. This often overcomes the chronic spasm. It is by such means that many miracles of the bone-setters are produced. In the chronic and obdurate forms treatment should be repeated at least twice a week, gradually increasing the force and depth of pressure and length of seance. Manipulation should always be followed by active movements made by the patient, carefully directed functional training, to secure accuracy in action and to equalise the coördination. Movements should be made in accord with laws of "protective reactions" and "distributing the direction of the load," with due consideration to states of contracture or relaxation—tonus or hypertonus, which I have described elsewhere.¹

A particularly important accessory measure is expert muscle training in exact directions and degrees of force. By this means confidence is restored as well as adhesions and contractures overcome. It is common to meet sufferers who have been admonished to make no movement which causes pain. The truth is, when a movement causes pain that movement should be made repeatedly with increasing force.

The skin should be educated to protect itself and the hypersensitive muscles from chilling by friction with a dry towel on rising and on going to bed; also by gradations of exposure to air and by alternations of heat and cold as by hot and cold douches. Dry skin friction is vastly superior as a tonic to the peripheral circulation than is bathing in any form. The late Weir Mitchell frequently used a "salt towel"—i.e., a coarse "kitchen towel" dipped in salt water and dried—for friction.

Summary.

1. Keep in mind that any obscure muscle pain, brief or protracted, or lameness, or morbid alteration of posture or gait or tenderness, may be due to fibromyositis, hence determine by critical palpation what the afflicted or suspicious areas signify.

2. Relief of these local disordered conditions, whether painful, tender, or structurally significant, may clear up the matter, or in any event simplify the problem.

3. Cure of a fibromyositis may contribute materially to the limitation of any existing collateral sensory disorder or "transferred pain" by the removal of sources of reflex irritation, protective spasm, or by reducing the sum-total of morbid factors present.

4. Local hypersensitiveness in muscle masses, due to any one of a large variety of primary or secondary causes, frequently are exhibited in the form of a fibromyositis, revealing other co-existing factors, such as a focal sepsis, a central irritation, or a peripheral diseased state.

5. Cure of the local manifestations may be achieved by revising and regulating conduct through personal hygiene by modifications of diet, regulating exertion, reducing fatigue, especially exhaustion from excessive repetitions of monotonous motions as caused by restricted acts in labour; by

¹ See "Tonic Spasm," N.Y. Medical Record, October, 1918.

accustoming the patient to abrupt exposures to temperature changes and generally equalising force expenditure through salutary modifications in habits in accord with rational demands for activities.

6. In treatment, whatever other curative agencies are employed, do not omit to consider thorough colon irrigations; nor deep manipulations, after careful determination of conditions in the affected area.

7. While constitutional derangements demand attention and regulation, the local anomaly should receive adequate care. Sometimes powerful revulsives are needed—by blister, cautery, freezing, iodine, &c.—always followed by strapping with Z.O. plaster. The main cure, however, is always by manual treatment directed to the neuro-muscular mechanisms.

8. After due attention has been afforded by suitable measures applied to the constitution, to special organs, and to the affected area, there remains a need for functional education in the form of (a) mental readjustment to the complex problems of chronicity, protracted disability, and previous disappointments, loss of confidence in performing movements, &c.; and (b) re-educating the bewildered muscles to do their appointed work with precision and confidence.

9. Finally, the individual who suffers at any time from fibromyositis needs to learn and to practise thorough hygienic habits essential for his or her "diathesis," or "type of tissue cells," or peculiarities of neuro-muscular adjustments, or capabilities of elimination. Among the first of these good habits (euthenics) is to live as much as possible out of doors in all weathers, maintaining reasonable activities, and, while not over-fatiguing, yet to beware of the one unpardonable sin of physical and mental stagnation, deterioration from disuse.

10. Red Cross work, "drives" to raise funds for the "War Chest," canvassing for the sale of War Bonds and war-saving stamps, and other enthusiastic expenditures of energy afford great opportunity to stagnant mentality that will do much to relieve many patients. It offers an incentive that will keep their brains and bodies in useful activity and emancipate them from weakness and pain.

Medical Societies.

ROYAL SOCIETY OF MEDICINE.

CLINICAL SECTION.

A MEETING of this section of the Royal Society of Medicine was held on Nov. 14th, Dr. H. BATTY SHAW being in the chair.

MALIGNANT DISEASE OF THE FACE.

Mr. HENRY CURTIS read a paper on Three Cases of Malignant Disease of the Face, one of the lower lip, two of the nostril, surviving after more than five years, illustrating modern methods of radical operation. The parts removed and one of the patients were exhibited.

CASE 1.—A man, aged 53, with extensive squamous epithelioma of the left half of the lower lip encroaching on the angle of the mouth. Operation in June, 1914, the patient being exhibited at the meeting.

CASES 2 and 3.—Primary carcinoma of the external surface of the ala nasi, a condition of considerable rarity apparently, one in a man aged 43, operated on in December, 1913, the other in a woman aged 57, operated on in August, 1914; both cases alive and well, November, 1919.

The operations were devised in general conformity with the principles laid down by Sir Lenthal Cheatle in planning incisions for the removal of a cancer from the front of the face, so as to excise the growth with, wherever possible, at least three-quarters of an inch of skin around, and taking the entire thickness of the cheek, "everything down to the bone," together with all the lymphatics and glands likely to be involved en bloc. The old V-shaped incision for growths of the lower lip was condemned, the author quoting Rowntree's statistics from the Middlesex Hospital, showing 31 per cent. of local recurrence out of 126 cases, in the majority of which this operation had been used. Infected

lymphatics, he said, leading from a growth diverged as they passed to the corresponding glands; whereas the lines of the V-shaped incision converged, thus cutting across channels infected with cancer cells. This explained the great frequency of local recurrence. Cancer of the lower lip usually spread along the margin, but more rarely it spread downwards to a greater degree than usual before it eventually curled round the angle of the mouth to reach the upper lip. Hence in early cases it was impossible to say in which of the two directions the cancer was mainly spreading, and it was therefore advisable that the incisions be planned to include both paths of spread.

As to the two cases arising in the ala nasi the speaker referred to modern views on cancer of the upper lip, which he considered to be to some extent applicable also to growths spreading in the opposite direction—i.e., from the ala nasi—downwards. Sir Lenthal Cheatle had pointed out complications which did not concern growths in the lower lip or angle of the mouth: 1. The early spread along the alveolar margin of the upper jaw, particularly in growths beginning in or spreading to the central part of the upper lip, which is shorter here than elsewhere. Atrophy of the normal tissue, and contraction of the newly formed connective tissue which encircles and pervades a cancer are factors leading to invasion of the jaw. 2. When cancer begins in the upper lip the columella is more invaded than the ala nasi. The septal origin of the orbicularis oris forms an easy pathway by which the disease reaches the columella. A more radical operation than had hitherto been generally advocated was therefore necessary for growths of the upper lip and ala nasi.

EXHIBITION OF CLINICAL CASES.

Mr. ARTHUR EDMUNDS showed an infant with a Congenital Tumour (? Teratoma) on the head in the region of the anterior fontanelle. It was about the size of a goose's egg, was covered by thickened skin and of variable consistency, containing solid nodular material and some bone.

Mr. EDMUNDS also showed a case of Multiple Bone Abscesses. The patient, a young girl, had had a very serious illness some years ago, which had left her with bony synostosis of both hip-joints. Subsequently she had continued to develop suppurative foci in her bones with the formation of sinuses, through which exfoliated pieces of dead bone were extruded. The nature of the infection was unknown; there was no evidence of tuberculosis.

Dr. PHILIP HAMILL showed a young man with Aortic and Mitral Valvular Disease, who had developed an aneurysm of a femoral artery. This had been successfully treated surgically by ligature above and below and by extrusion of the clot. The patient's general health was good, and Wassermann reaction and blood culture were negative. The case was regarded as one of mild infective endocarditis with embolic aneurysm.

Dr. S. A. K. WILSON showed an elderly woman with a Cervical Rib on each side. The wasting of the thenar eminences was characteristic of this condition, being confined to the part external to the long flexor tendon, the adductors of the thumb escaping. Symptoms, which were only slight, had not appeared until recent years and were ascribed to loss of tone in muscles and ligaments due to her age and to consequent descent of the pectoral girdle.

Dr. WILSON also showed a case of Dislocation of Cervical Vertebrae in a woman, following an accident. In spite of gross dislocation between the fifth and sixth cervical vertebrae there had been no real injury to the cord. Only a few subjective symptoms remained, and the patient was able to move her head with considerable facility.

Dr. WILSON also showed a case of (?) Trophœdema. The woman had had some œdematous swelling of the right leg for over 30 years, and this was succeeded by œdema of the left. After removal of the breasts a similar condition appeared on the arms; it was segmental in distribution and amounted in degree to pseudo-elephantiasis. None of the usual causes of œdema were present, and the patient enjoyed good health except for a sense of weight and fullness in the limbs. There was no hereditary or familial history.—Dr. F. PARKES WEBER agreed with the diagnosis. He said that there were far more cases of trophœdema without a family history of the condition than with one.

The CHAIRMAN showed the case of Œsophagectasia described at length in our issue of Nov. 22nd, p. 923.