臨　　床

Some Considerations on the Diagnosis of Humeroscapular Periarthritis

by

HAJIME ODA

Clinic of Orthopaedic Surgery, Wakayama Red Cross Hospital, Wakayama
(Director : Dr. SHIN MORITA)

Received for Publication July 19 1967

The essential pathology of humeroscapular periarthritis, to which we are accessible by means of intuition sustained by logical basis with the facts at hand previously obtained by the efforts of many authors, is seldom given as a fact of self-evidence in confrontation with each of patients at their first seen. Then some criteria, as were presented by MIKI[3], had been chosen for the conveniences of clinical practice, which enabled the active participation of many surgeons and progress of research in this field. But the criteria, however explicitly expressed, prepare a pitfall to make surgeons arbitrarily cut off the reality. For the clinical diagnosis is not the procedure of abstraction selecting some prominent features in order to mark the name of the disorder upon the patient but it consists in the explicit cognition of the essential pathology from which comes out a variety of disturbances, the conjecture of the fate of the disorder based upon this cognition and the determination of the mode of treatment. For that reason, we venture to consider fundamentarily the diagnosis of humeroscapular periarthritis. But before discussions of the topic, the author's experience and conception of the disorder will be briefly reviewed.

SUMMARIZED DESCRIPTION OF OUR EXPERIENCE IN THE TREATMENT OF HUMEROSCAPULAR PERIARTHRITIS[5].

1) The age distribution is widespread from the ages of five to eighty-five with a marked preponderance of the ages between forty and seventy years (Fig. 1).

2) The point of tenderness by pressure with the thumb is mostly found along the course of tendo capitis longi m. bicipitis and in the region of m. teres minor. The tenderness in these regions is apt to remain until the complete healing of the disorder.

3) The patients were treated with an interval of one week by means of an injection method in the regions of the tenderness with a corticosteroid (Predonine) diluted with local anaesthetics (Xylocaine) of low percentage. The active movements of the affected upper extremities were combined with the injection therapy. In the very early stage of treatment, the patients were freed from severe pain and disturbances in their daily life. But the interval from the beginning of the treatment to the complete healing varied in each of many cases. The reason might be as follows ;

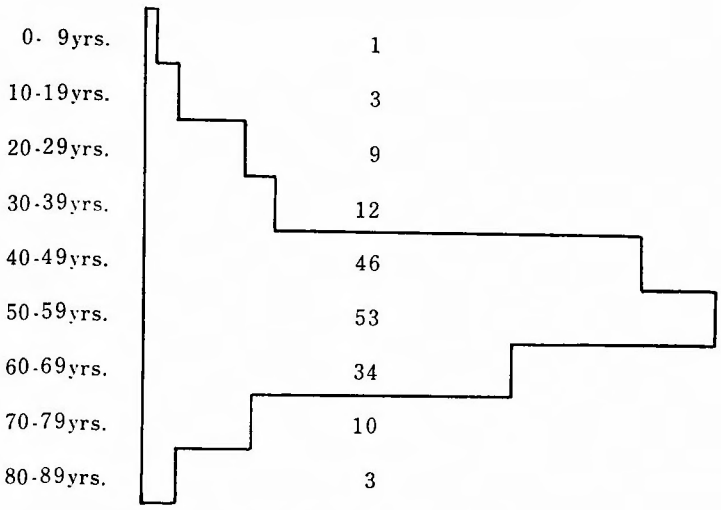

Fig. 1 Age distribution of 171 patients.

(1) A variety of stimuli is responsible for the inflammatory process, that is, the stimuli may be transient or persistent.

(2) The reactivity of patients to the stimuli is of variety.

(3) Organic contracture of the shoulder is of various degree at the beginning of the treatment.

4) In the periarticular tissues of humeroscapular periarthritis have been found by many authors inflammatory and degenerative changes[1)2)4)6)], which are the premises in the determination of the essential pathology of this disorder. On the other hand, the disturbances are in almost all cases transient and easily lessened by an appropriate treatment, even in the patient with severe stiffness of the shoulder joint. Therefore the degenerative changes in the shoulder joint cannot be the essential pathology of the disorder, although an important factor responsible for and modifying the disturbances. For if it were so, the disturbances would be always progressive with the advancing age of patient and the restoration could be by no means obtained. On the contrary, if we regard the inflammatory changes, one of the premises, as the essential pathology of the disorder, the entire course and disturbances of the disorder are easily explained by the biological, defensive on the teleological view-point, reaction to injurious stimuli in a wide sense.

5) The factors causing and modifying the essential pathology are as follows ;

(1) degenerative changes,

(2) trauma,

(3) vaso-motor disturbances due to abnormalities of the cervical region,

(4) decreased pump action of the muscles, etc.

A variety of other factors due to various conditions of body and life may be responsible for the disorder. But the stimuli causing the inflammatory process can be divided according to their nature in space and time into these four types ;

(1) Local (in situ)-transient.

(2) Local-persistent.

(3) Remote-transient.

(4) Remote-persistent.

6) The multiplicity of the disturbances in humeroscapular periarthritis will be reduced to an inflammatory reaction chiefly of the perivascular and rough connective tissues in the periarticular soft tissues. Once the reaction occurred, pain and muscle spasm are followed by local circulatory disturbances, which are moreover aggravated by an organic contracture of the shoulder joint due to the adhaesions of the soft tissues and growth of the connective tissues as a consequence of inflammation. The circulatory disturbances thus strengthened increase moreover the stiffness of the shoulder. Then a vicious circle are formed as the pathology of the disorder (Fig. 2).

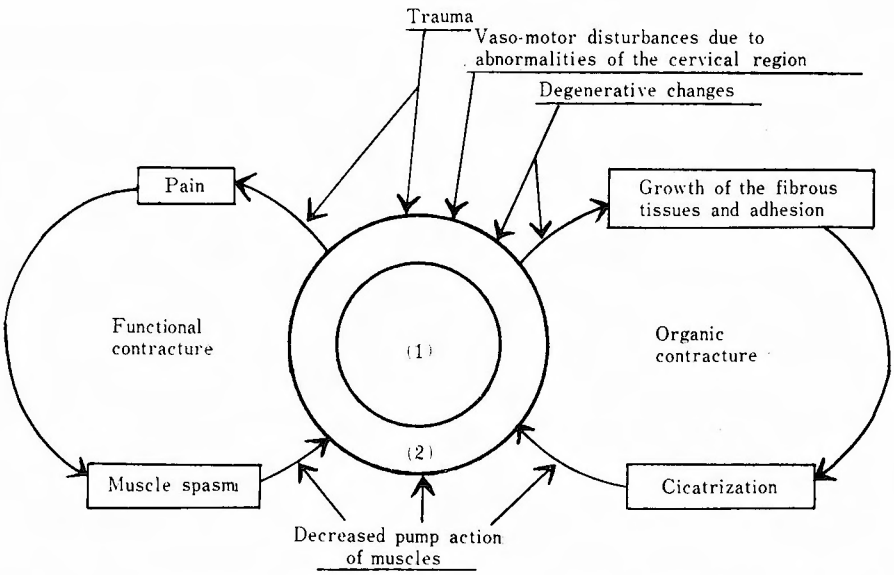

Fig. 2 The pathology of humeroscapular periarthritis forming a vicious circle on the basis of local circulatory disturbances. (1) Inflammatory exsudation. (2) Local circulatory disturbances.

7) The key-point of treatment consists in the inhibition of the inflammation followed by this vicious circle and the restoration of disturbed local circulation by means of active movements of the joint. Also the organic contracture can be surpassed by the active movements and, if needed, by gentle manipulation, which may encourage the patient to participate actively in the treatment. If the stimuli responsible for the inflammation are persistent in their nature, they are to be converted by some means or other from persistent to transient during the course of treatment.

VARIETY OF DISTURBANCES AND DIAGNOSIS

The prominent disturbances of humeroscapular periarthritis are the pain and restricted movements of the shoulder joint. But they are not necessarily the pathognomonic signs. For there are many other diseases of the shoulder with pain and restricted movements. Further, the main disturbances vary in their intensity and degree depending upon the stages of the disorder, the reactivity of the individual and the nature of stimuli. In fact,

there are some patients who complain pain and tenderness without any noteworthy restriction of movements and also a few patients with severe restriction of movements without pain. Therefore, if we choose as the characteristic triad of the disorder some prominent features, e.g. (1) pain and tenderness, (2) restricted motion range of the shoulder joint and (3) preponderance of the disorder in the late adult life, those are by no means the sufficient conditions of the diagnosis but in most cases merely the necessary conditions of the disorder.

The diagnosis must be based upon our estimation of the essential pathology of the disorder as the unity of various disturbances. But the pathology, inflammation, is not the self-evident data except in very rare instances. For example, the swelling of the periarticular tissues of the shoulder is seldom observed in many cases of the disorder, although the tenderness by pressure with the thumb in the periarticular soft tissues of the shoulder may be a reliable mediate representation of inflammation, if we take into consideration the site of tenderness. Thus in confrontation with each of patients, a variety of disturbances as the present illness must be explained in terms of inflammation without its immediate evidences, as were presented in a summarized expression in Fig. 2. In other words, if the disturbances of each patient can be sufficiently explained in terms of inflammation, we can reversely estimate that the inflammation is the essential pathology unifying a variety of disturbances in each patient.

This is a question between the individual and the general. The individual is of concreteness with the reality and it receives the actuality from the general. For the individual is the exemplification of the general and the general the characterisation of the individual. In each of patient with humeroscapular periarthritis, it is the patients that are of concreteness and of reality. The concreteness in the disorder is besides the main disturbances the subtlety of the tone of speech complaining of the pain and tenderness, depressive emotional tone, dim and vague feeling which is pushed away behind, escaped from our conscious effort of attention, into the background of the reality. Our contact with the concreteness as such is the primary in the diagnosis of the disorder, which will be possible by means of the penetration of the subject into the object. The differential disgnosis with caution, however important, is involved in the process of diagnosis. It is not attained with some tables for differential diagnosis of textbooks, which are useful only for the training of medical students, although they might provide the diagnosis with some guise of extreme objectivity. In fact, the extreme objectivity is devoid of a sense. The objectivity requires the subjectivity and it is yielded when the subject of full activity is directed outwards beyond itself with the intermediation of the sense. Thus, the diagnosis with certainty is based upon the sense of criticism.* The critical attitude of mind is the spiritual effort for the synthesis of the individual and the general. The individual must be neither subsumed nor resolved under such predetermination of the general as to impose some criteria upon the individual. The individual, which is resistant to be rationalized and abstracted, must not, however, remain undetermined. In our clinical practice, we

*The sense must be purified from the common sense, which would be often of prejudices in the closed society. For the sense is righteous only when we are communicable by means of the sense not only with the finite but also with the infinite. The sense thus will be immanent within itself and also transcendent beyond itself. It is the basis both of religeous experience and science, between which finds itself the cliniel medicine.

determine, although with inevitable reserves, not only the individual but also the general. The determination of the individual will be the diagnosis and that of the general the development of theory of the disorder. In this way, we proceed in our experience to obtain the knowledge of which the system remains unclosed and the diagnosis becomes possible even though stressed upon the individuality in the clinical practice, such as in the diagnosis of humeroscapular periarthritis. What is then needed for us is the sense of criticism and the freedom of spirit, only which allow us to penetrate into the unknown.

SUMMARY

The essential pathology of the so called humeroscapular periarthritis is estimated as the inflammation from logical basis with the premises of the well-known histological findings and clinical features of the disorder. The inflammatory reaction of the periarticular tissues of the shoulder forms a vicious circle based upon local circulatory disturbances. The injurious stimuli responsible for and modifying the reaction were divided according to their nature into four types.

As the essential pathology, inflammation, is not given at first as a fact of self-evidence, the diagnosis of the disorder is ascertained with the explanation of various disturbances in terms of inflammation. It is the synthesis of the individual and the general, which will be possible with the sense of criticism. That is, with the sense of criticism and the freedom of spirit, we can penetrate into the concreteness in order to determine not only the individual but also the general.

REFERENCE

1) De Palma, A. F. : Surgery of the Shoulder, Lipincott, 1950.
2) Jinnaka, S. : Jinnaka's Textbook of Orthopedic Surgery, Nanzando, 1941. (Japanese)
3) Miki, I. : So called Gojukata, J. Jap. Orthop. Ass. **21**, 18, 1947. (Japanese)
4) Miki, I. : Gojukata, Seikeigeka (Orthopedic Surgery), **13**, 759, 1962. (Japanese)
5) Oda, H. : Clinical Study of Periarthritis Humeroscapularis, Central Jap. J. Orthop. & Traum. Surg. **9**, 767, 1966. (Japanese)
6) Rössler, H. : Zur Problematik der schmerzhaften Schultersperre, Zeit. Orthop. u. Grenz. **92**, 233, 1960.

和文抄録

肩胛関節周囲炎の診断に関する考察

和歌山赤十字病院整形外科（主任：森田信部長）

小　田　　一

既に知られている病理組織像及び臨床像を基にして，所謂肩胛関節周囲炎の本態は炎症であると言えるが，炎症性反応の時期，障害刺激の性質及び個体の反応性により病像は多様である．この疾患に特徴的な圧痛点は間接的に炎症の存在を表現しているが，個々の患者の初診時には，炎症が自明なる事実として直接与えられないのであるから，多様なる障害を炎症により統一し説明できれば，肩胛関節周囲炎と診断が下されるのである．

肩胛関節周囲炎の診断が抽象的な主症状と発症（好発）年令を根拠として下されれば，その診断は機械的であり，真の客観性も診断に伴なわぬのである．何故ならその立場は極端な externalism であり，そこには主観もなければ客観もなく，診断手続きは単なる機械的操作に堕ちるからである．

見ることが即ち考えることでなければならぬ我々の臨床診断においては，かかるあらかじめ限定された所謂一般に個別を機械的に抱摂することなく，具体的で個別的なものへの洞徹を基にして，個別と一般を限定せねばならぬのである．そして個別の限定が診断となり，一般の限定が疾患に関する理論となる．その際我々に要求されるのは自由なる批判精神である．