EDITORIAL

Adhesive Capsulitis of the Shoulder, Its Relationship to Diabetes Mellitus, and the Need for Effective Treatment

Adhesive capsulitis (AC) is a common condition that presents with capsular pattern of the glenohumeral joint and is commonly linked with pain and loss of shoulder mobility. It is sometimes referred to as frozen shoulder or painful stiff shoulder. Idiopathic AC is more common in patients with diabetes and middle-aged women; other causes include advanced age, prior trauma, dyslipidemia, hypertension, stroke, and hyperthyroidism. The prevalence of AC in diabetes was reported 13.4%[1] and 32.3% [2], with a greater incidence in urban dwellers and high-income people. Its incidence is approximately 2% in the general population and there was a strong correlation between poor glycemic status, the length of DM, and AC.[2]

Thus, the appropriate course of therapy for this disabling condition depends on understanding the demographics, related impairment, risk factors connected with the condition, and incidence rates of both DM in AC and AC in DM.

Approximately 20% of individuals with diabetes are unaware that they have the disease and it is estimated that the prevalence of diabetes worldwide will increase to 10.0% by 2045. The prevalence was higher in high-income nations (10.4%) than in low-income countries (4.0%), and in urban regions (10.8%) than in rural areas (7.2%).[3] There were about 13.14 million cases of diabetes in Bangladesh in 2021and an estimated 75,617 deaths occurred due to diabetes-related complications during the period.[4] A survey conducted in 2022 found that the overall prevalence of DM was 9.2%, where more than 61.5% were unaware of the condition and only 30.4% of them had controlled diabetes.[5] The results of this research are concerning, and it is easy to estimate how many people in Bangladesh are afflicted with AC connected to DM.

Shoulder function is necessary for performing daily living activities such as grooming, self-hygiene, leisure activities, and work associated with paid employment. The physical and psychological problems experienced by affected individuals vary in severity, necessitating a team approach led by a qualified physiatrist that focuses on lifestyle adjustment, comorbidity management, and institution-graded therapy modalities such as rehabilitation.

AC is a self-limiting condition, and the syndrome is often divided into several stages, namely the painful stage, freezing stage, frozen stage, and stage of resolution.[6] The diagnosis and assessment of the stage of AC disease are clinical; however, an MRI scan and/or a single glenohumeral joint x-ray in anteroposterior view, as well as a bedside ultrasound examination, may be necessary in certain circumstances. The purpose of treatment is to minimize pain, enhance shoulder mobility, and improve functions in a graded approach.

Patient education and counseling regarding the course of the disease, life style modification, and the effect of DM on AC is the most crucial aspect of treatment. Many patients can be treated without the need for complex and time-consuming procedures or potent painkillers. Outdoor physical therapy, extracorporeal shock wave therapy, hydrodissection guided by ultrasonography, early corticosteroid injections, and hyaluronic acid injection are among the available techniques.[7]

These treatments should be taken under the supervision of a physiatrist with frequent follow-up visits for outdoor aerobics and shoulder exercise protocols. A few cases might necessitate surgical intervention, such as arthroscopic capsular release or manipulation while under anesthesia.[7]

While most of the aforementioned treatment alternatives are only available in tertiary or specialty care institutions located in urban areas, the bulk of the country's population lives in rural communities. The lack of medical experts with the requisite expertise, high costs, and restricted access to prescription drugs all pose significant obstacles to accessing healthcare. By 2050,

one in five Bangladeshis are predicted to be over 60. The country's population is aging. Together with the rise in noncommunicable diseases, diabetes-related conditions would cause the demand for healthcare services to explode.

It is advised to create a nationwide single ID digital database, conduct early risk factor screening, awareness-raising audio-visual initiatives, and empower community health clinics by establishing strong referral networks.

Keywords: Adhesive capsulitis of Shoulder, Diabetes, Disability and Treatment

(J Bangladesh Coll Phys Surg 2024; 42: 221-222)
DOI: https://doi.org/10.3329/jbcps.v42i3.74670

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