Flex Therapist CEUs

Frozen Shoulder

Biological Aspect of Pathophysiology for Frozen Shoulder

1. Arthroscopic and imaging studies have demonstrated that capsular tissue of the glenohumeral joint including rotator interval is the major pathologic site of frozen shoulder.

A. True
B. False

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2. The histologic characteristic of frozen shoulder is a matrix of types _____ collagen inhabited by fibroblasts and myofibroblasts, which is controlled by an abnormal cytokine production.

A. I and II
B. I and III
C. II and III
D. I, II, and III

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3. Several studies have demonstrated that increased expression of inflammatory mediators in the _____ of the joint capsule is essential in the pathogenesis of frozen shoulder.

A. Synovial tissue
B. Ligament
C. Articular cartilage
D. Fibrous tissue

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4. Compared to a control group, increased expression of all of the following have been documented in the joint capsule and in the subacromial bursa of those with frozen shoulder, except for:

A. IL-1alpha
B. TNF-alpha
C. COX-1
D. COX-2

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5. Vimentin is highly expressed in synovial cell and extracellular matrix of all of the following, except:

A. Rotator interval
B. Coracohumeral ligament
C. Axillary pouch

D. Posterior capsule

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6. Data suggest that there is no need to routinely perform a posterior capsular release in patients suffering from primary frozen shoulder.

A. True
B. False

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7. Compared with normal controls, intercellular adhesion molecule-1 levels were significantly higher in _____ of patients with frozen shoulder.

A. Serum
B. Joint fluid
C. Capsule
D. Levels of ICAM-1 were significantly higher in capsule, serum, and joint fluid of those with frozen shoulder compared to normal controls

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8. Previous studies have concluded that primary frozen shoulder produces more matrix metalloproteinases and has a larger MMP/TIMP ratio than controls.

A. True
B. False

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9. All of the following were significantly higher in those with frozen shoulder compared to controls, except for:

A. MMP-1
B. TIMP-1
C. TIMP-2
D. TGF-beta1

The pathophysiology associated with primary (idiopathic) frozen shoulder: A systematic review

10. Frozen shoulder is associated with all of the following, except:

A. Pain
B. Anxiety
C. Depression
D. Sleep deprivation

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11. The average duration of frozen shoulder is 14 months.

A. True
B. False

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12. Primary frozen shoulder is associated with:

A. An intrinsic cause
B. An extrinsic cause
C. An insidious onset of idiopathic origin
D. A medical condition

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13. As arthroscopic and microbiological techniques have advanced, other structures have been associated with the pathogenesis of the condition, namely:

A. Rotator interval
B. Long head of biceps
C. Coracohumeral ligament
D. RI, LHB, and CHL have all been associated with the pathogenesis of frozen shoulder

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14. This review identified that the anterior shoulder structures in primary frozen shoulder were the location of greatest pathological change and in the subsequent clinical features of the disease, namely a loss of external rotation of the shoulder.

A. True
B. False

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15. Shoulder joint capacity often reduces to _____ mL in cases of frozen shoulder.

A. 0 - 5
B. 5 - 10
C. 10 - 15
D. 15 - 20

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16. Vimentin was strongly expressed:

A. Anteriorly
B. Posteriorly
C. Superiorly
D. Inferiorly

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17. Based on vimentin expression, it is suggested that fibroplasia and contracture may be different processes.

A. True
B. False

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18. Evidence in both bone and tendon literature suggests that ibuprofen reduces:

A. Tensile strength
B. Collagen fiber organization
C. Fibroblastic proliferation
D. Ibuprofen reduces tensile strength, collagen fiber organization, and fibroblastic proliferation

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19. Is was found that there is increased expression of COX1 in the capsule and subacromial bursa of those with frozen shoulder.

A. True
B. False

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20. A previous study reported low numbers of macrophages and leukocytes in the:

A. Axillary fold
B. Rotator interval
C. Long head of biceps
D. Coracohumeral ligament

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21. Findings confirm the presence of mature and regenerating nerve fibers in the anterosuperior capsule and may explain the severe pain experienced by sufferers of the condition in the first:

A. 30 days
B. 6 months
C. Year
D. 2 years

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22. Increased vascularity was a common feature identified in the histology studies, particularly located in the anterosuperior structures but absent in the inferior structures with the exception of the:

A. Axillary fold
B. Rotator interval
C. Long head of biceps
D. Coracohumeral ligament

Left and Non-Dominant Shoulders Were More Frequently Affected in Patients with Frozen Shoulder: A Systematic Review and Meta-Analysis

23. The influence of brain abnormalities appears to be stronger than that of trauma.

A. True

B. False

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24. Based on previous findings, it has been reported that pain was more often lateralized on the left, except in the case of:

A. Migraines
B. Temporomandibular joint dysfunction
C. Trigeminal neuralgia
D. Optic Neuritis

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25. Which shoulder was found to be affected in the highest percentage of patients?

A. The right shoulder
B. The left shoulder
C. The dominant shoulder
D. The non-dominant shoulder

Shoulder proprioception - lessons we learned from idiopathic frozen shoulder

26. It has been noted that the elongation of the _____ are less at 45 degrees of abduction than at 90 degrees of abduction.

A. Medial gleno-humeral ligament
B. Anterior band of the inferior gleno-humeral ligament
C. Posterior band of the inferior gleno-humeral ligament
D. MGHL, ABIGHL, and PBIGHL

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27. Placing the arm in the modified neutral position allows relatively minimal tension to be placed on particular passive shoulder restraints.

A. True
B. False

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28. The modified neutral position is very close to 60 degrees of abduction in the scapular plane, which has been demonstrated to facilitate reliable isokinetic assessment of shoulder internal rotation and external rotation strength.

A. True
B. False

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29. Anatomical differences between anterior and posterior passive stabilizers, and differences in the distribution of the particular types of mechanoreceptors contained therein, do not affect passive joint position sense in the modified neutral position.

A. True
B. False

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30. No statistically significant difference was found between the involved shoulder and the uninvolved shoulder with regard to acceleration time for external rotation.

A. True
B. False

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31. The study revealed spontaneous ability of the PC, PBIGHL, MGHL and ABIGHL to heal and recover sufficient tension such that normalization of both IR and ER PJPS post-capsuloligamentotomy in idiopathic frozen shoulder was achieved.

A. True
B. False

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32. Together with careful clinical and proprioception examination, isokinetic testing should be a part of any global shoulder function evaluation in overhead sport activities.

A. True
B. False

Clinical outcome of arthroscopic capsular release for frozen shoulder: essential technical points in 255 patients

33. In a pathological aspect, the thickness of the coracohumeral ligament over _____ mm and joint capsule over 7 mm by MRI was important to the diagnosis of frozen shoulder.

A. 5
B. 4
C. 3
D. 2

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34. Cochrane reviews have demonstrated that the current literature base shows that physiotherapy alone has significant benefit when compared to control groups.

A. True
B. False

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35. Arthroscopic release induced all of the following, except:

A. Removal of synovium from the rotator interval.
B. Release of the posterior glenohumeral ligament.
C. Release of the intra-articular portion of the subscapularis tendon.
D. Division of the anterior half of the inferior capsule.

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36. After arthroscopic capsular release, the results demonstrated that all of the following ranges of motion improved EXCEPT:

A. External rotation
B. Flexion
C. Abduction
D. Internal rotation

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37. Coracohumeral ligament thickness and wide spread was especially evident in which type of shoulder joint?

A. Those with slight degree of synovitis, no adhesion by obtuse rod, and slight thickness of the release capsule.
B. Those with moderate degree of synovitis, moderate adhesion of the LHB by obtuse rod, and moderate thickness of the released capsule.
C. Those with severe degree of synovitis, severe adhesion of the LHB by obtuse rod, and severe thickness of the released capsule adhesion and a flatly shaped LHB.
D. None of the above.

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38. Peak incidence of frozen shoulder is between ages 35 to 55 years.

A. True
B. False

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39. This study considers the _____ period to be the most important window for obtaining better results by rehabilitation after arthroscopic capsular release.

A. 2-week
B. 1-month
C. 3-month
D. 6-month

Adhesive capsulitis of the shoulder, treatment with corticosteroid, corticosteroid with dissension or treatment-as-usual; a randomized controlled trial in primary care

40. There is a strong correlation between adhesive capsulitis and all of the following medical conditions, except for:

A. Hypertension
B. Diabetes
C. Rheumatic disease
D. Heart disease

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41. Adhesive capsulitis generally involves reduced movement of the gleno-humeral joint in several planes, with most restriction of:

A. External rotation
B. Abduction
C. Internal rotation
D. The capsular pattern

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42. The freezing phase of adhesive capsulitis, with progressive stiffness, lasts from 5 to 26 months.

A. True
B. False

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43. Adhesive capsulitis is often treated with three to six corticosteroid intra-articular injections with increasing interval between injections.

A. True
B. False

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44. A systematic Cochrane review regarding efficacy of hydrodilatation concludes that arthrographic distension with saline and steroid provides short-term benefits in:

A. Pain
B. Range of movement
C. Function
D. Pain, range of movement, and function in adhesive capsulitis were all short-term benefits

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45. Hydrodilatation studies did not demonstrate any statistically significant differences in functional outcome compared to steroid injection.

A. True
B. False

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46. A previous study observed capsular rupture at a volume as low as:

A. 20 mL
B. 15 mL
C. 10 mL
D. 5 mL

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47. A dose of _____ Triamcinolone was a tradeoff dose between effect and side effects in the intervention groups and is the generally accepted and practiced treatment dose for adhesive capsulitis in primary care.

A. 10 mg
B. 20 mg
C. 30 mg
D. 40 mg

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48. From the patient's perspective, pain relief leading to undisturbed sleep is of great importance.

A. True
B. False

Suprascapular Nerve Block Followed by Codman's Manipulation and Home Exercises "An Effective Combined Approach in the Rehabilitation of Idiopathic Frozen Shoulder": A Review

49. The most important factor limiting patients' cooperation in exercise is:

A. Education
B. Motivation
C. Pain
D. Ability

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50. Even after shoulder manipulation, regular supervised physiotherapy is critical to ensure a mobile, painless shoulder, otherwise:

A. Significant stiffness quickly returns
B. Patients stop performing the exercises
C. Patients revert back to improper techniques
D. Shoulder dislocation is a common complication

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51. Which of the following is a common complication during shoulder manipulation?

A. Fracturing the humerus
B. Tearing of the joint capsule or rotator cuff
C. Traction injury to nerves

D. All of the above are common complications during shoulder manipulation

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52. The Codman's manipulation is achieved when the arm performs a closed-loop motion by three consecutive 60 degrees rotations, each around the respective coordinate axis.

A. True
B. False

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53. During which arthroscopic stage is passive ROM similar with or without anesthesia and histology shows hypertrophic, hypervascular synovitis with capsular scaring?

A. Inflammatory
B. Freezing
C. Frozen
D. Thawing

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54. During which arthroscopic stage do pathological specimens show reduced synovitis and dense scar formation in the underlying capsule.

A. Inflammatory
B. Freezing
C. Frozen
D. Thawing

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55. Patients presenting with _____ stages have pain on palpation of the anterior and posterior capsule and describe pain radiating to the deltoid insertion.

A. Inflammatory and freezing
B. Freezing and frozen
C. Inflammatory and frozen
D. Frozen and thawing

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56. Most of the movements in a severely affected frozen shoulder occur at the gleno-humeral joint.

A. True
B. False

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57. Pain pumps are suggested to assist in early pain-free mobilization in the first few days of arthroscopic capsular release and should be placed intra-articular.

A. True
B. False

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58. Which suprascapular nerve block approach attempts to block the SSN at the level of suprascapular notch?

A. Superior
B. Lateral
C. Anterior
D. Posterior

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59. What is the first move of the Codman's manipulation?

A. The patient hangs his or her arm along the side with the thumb pointing forward and fingers pointing toward the ground.
B. The arm is elevated 90 degrees in the sagittal plane without rotating about the humeral shaft axis.
C. The arm is elevated 90 degrees to the coronal plane without rotation about the humeral shaft axis.
D. The arm is moved 90 degrees downward.

Analgesic Effect of Extracorporeal Shock Wave Treatment Combined with Fascial Manipulation Theory for Adhesive Capsulitis of the Shoulder: A Retrospective Study

60. In the present study, how many sessions of extracorporeal shockwave therapy combined with fascial manipulation were needed for a 50% reduction on the pain-on-movement numeric rating scale?

A. A single session
B. Three sessions
C. Six sessions
D. Eight sessions

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61. The present study distinguished _____ as contributing most to the ROM improvements.

A. ESWT-FM
B. L-ESWT
C. Standard exercise
D. It could not be distinguished which contributed most to the ROM improvements

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Effect of Maitland Mobilization on Radiotherapy Induced Frozen Shoulder: A Case Report

62. The results of the present study suggest that Maitland mobilization can be the first line of treatment and is clinically competitive and safer in patients having frozen shoulder post radiation therapy.

A. True
B. False
