

**HIGH PREVALENCE OF PELVIC AND HIP
MRI FINDINGS IN ASYMPTOMATIC HOCKEY
PLAYERS.**

M. SILVIS, T. MOSHER et. al.

A.J.S.M. 2011 VOL. 39, No 4

ADDUCTOR-ABDOMINAL RECTUS DYSFUNCTION

1° BONE-MARROW EDEMA IN THE PUBIC SYMPHYSIS

2° FLUID IN THE DISC OF THE PUBIC SYMPHYSIS
(PRIMARY CLEFT SIGN)

3° PARTIAL OR COMPLETE AVULSION OF THE COMMON
ADDUCTOR TENDON FROM THE SYMPHYSIS
(SECONDARY CLEFT SIGN)

4° PARTIAL OR COMPLETE AVULSION OF THE ABDOMI-
NAL RECTUS TENDON AS INDICATED BY FLUID
SIGNAL BETWEEN THE APONEUROSIS AND
PUBIC CORTEX

HIP PATHOLOGIC ABNORMALITIES

1° ACETABULAR LABRAL TEAR AS INDICATED BY DIRECT VISUALIZATION OF A TEAR OR INDIRECTLY BY THE PRESENCE OF A PARA-LABRAL CYST

2° OSTEOCHONDRAL LESION OF THE FEMORAL HEAD OR ACETABULUM

3° HIP EFFUSION

PURPOSE OF THE STUDY

TO DETERMINE THE PREVALENCE OF PELVIC AND HIP MRI FINDINGS AND ASSOCIATION WITH CLINICAL SYMPTOMS IN HOCKEYPLAYERS.

METHODS

39 COLLEGIATE AND PROFESSIONAL HOCKEY PLAYERS

NO PARTICIPANTS REPORTED SYMPTOMS RELATED TO PELVIC OR HIPDISORDERS.

CONCLUSION

GIVEN THE HIGH PREVALENCE OF MRI FINDINGS IN ASYMPTOMATIC HOCKEY PLAYERS IT IS NECESSARY TO CAUTIOUSLY INTERPRET THE SIGNIFICANCE OF THESE FINDINGS IN ASSOCIATION WITH CLINICAL PRESENTATION.

THE POSSIBILITY EXISTS THAT THESE FINDINGS COULD BE INDICATIVE OF CUMULATIVE TISSUE DAMAGE THAT OCCURS BEFORE THE ONSET OF SYMPTOMS.

FUTURE STUDY

TO ASCERTAIN IF THESE FINDINGS ARE PRECURSOR LESIONS FOLLOW-UP WILL BE PERFORMED ON THESE SAME ATHLETES IN A PROSPECTIVE COHORT STUDY DURING THE NEXT PLAYING SEASONS.

ADHESIVE CAPSULITIS OF THE SHOULDER

A REVIEW OF CURRENT TREATMENT

A.S.NEVIASER,J.A.HANNAFIN

A.J.S.M. VOL. 38,No 11 p 2346

DEFINITION

ADHESIVE CAPSULITIS IS CHARACTERIZED BY A PAINFUL, GRADUAL LOSS OF BOTH ACTIVE AND PASSIVE GLENOHUMERAL MOTION RESULTING FROM PROGRESSIVE FIBROSIS AND ULTIMATE CONTRACTURE OF THE GLENOHUMERAL JOINTCAPSULE.

CODMAN IN 1934 USED FOR THE FIRST THE TERM « FROZEN SHOULDER » BUT « ADHESIVE CAPSULITIS » IS A MORE APPROPRIATE DESCRIPTOR OF THE PATHOANATOMY.

PRIMARY ADHESIVE CAPSULITIS

IDIOPATHIC (CAPSULAR INFLAMMATION AND CAPSULAR FIBROSIS)

SECONDARY ADHESIVE CAPSULITIS

ROTATORCUFF TENDINOPATHY

BICEPS TENDINOPATHY

GLENOHUMERAL OR A-C ARTHRITIS

ADHESIVE CAPSULITIS OCCURS IN

2% TO 5% OF THE POPULATION

MAJORITY OF PATIENTS IS FEMALE

AGES RANGE FROM 40 TO 60 YEARS

THE NONDOMINANT HAND IS MORE FREQUENTLY INVOLVED

20% TO 30% WILL REPORT A HISTORY OF MINOR TRAUMA

THE CAUSES REMAIN UNCLEAR

ADHESIVE CAPSULITIS HAS BEEN ASSOCIATED WITH

DIABETES MELLITUS

THYROID DYSFUNCTION

AUTOIMMUNE DISEASE

THE TREATMENT OF BREASTCANCER

CEREBROVASCULAR ACCIDENT

MYOCARDIAL INFARCTION

BUT IS IN FACT IDIOPATHIC

STAGE 1

SYMPTOMS :PAIN REFERRED TO DELTOID INSERTION
PAIN AT NIGHT

SIGNS: CAPSULAR PAIN ON DEEP PALPATION
EMPTY END FEEL AT EXTREMES OF MOTION
FULL MOTION UNDER ANESTHESIA

ARTHROSCOPY: FIBRINOUS SYNOVIAL INFLAMMATORY
REACTION
NO ADHESIONS OR CONTRACTURE

BIOPSY:RARE INFLAMMATORY CELL INFILTRATE
HYPERVASCULAR,HYPERTROPHIC SYNOVITIS
NORMAL CAPSULAR TISSUE

STAGE 2

SYMPTOMS: SEVERE NIGHT PAIN / STIFFNESS

SIGNS: MOTION RESTRICTED IN FORWARD FLEXION,
ABDUCTION AND INTERNAL AND EXTERNAL
ROTATION /SOME MOTION LOSS UNDER
ANESTHESIA

ARTHROSCOPY:CHRISTMAS TREE SYNOVITIS
SOME LOSS OF AXILLARY FOLD

BIOPSY: HYPERVASCULAR,HYPERTROPHIC SYNOVITIS
SUBSYNOVIAL CAPSULAR SCAR

STAGE 3

SYMPTOMS:PROFOUND STIFNESS /PAIN ONLY AT THE
END OF MOTION

SIGNS:SIGNIFICANT LOSS OF MOTION/ NO IMPROVEMENT
UNDER ANESTHESIA

ARTHROSCOPY:COMPLETE LOSS OF AXILLARY FOLD
MINIMAL SYNOVITIS

BIOPSY:HYPERCELLULAR COLLAGENOUS TISSUE WITH
A THIN SYNOVIAL LAYER

STAGE 4

SYMPTOMS:PROFOUND STIFNESS/ MINIMAL PAIN

SIGNS: GRADUAL IMPROVEMENT IN MOTION

ARTHROSCOPY:FULLY MATURE ADHESIONS
IDENTIFICATION OF INTRA-ARTICULAR
STRUCTURES VERY DIFFICULT

BIOPSY: NOT REPORTED

SUPRASCAPULAR NERVE BLOCKS

TEMPORARY DISRUPTION OF EFFERENT AND AFFERENT PAIN MAY ALLOW « NORMALIZATION » OF THE PATHOLOGICAL/NEUROLOGICAL PROCESSES PERPETUATING PAIN AND DISABILITY

DAHAN: 17 PATIENTS WITH A SERIES OF 3 BUPIVACAINE SSNBs COMPARED WITH 17 PLACEBO PATIENTS

OUTCOME AT 1 MONTH

PAIN : 62% IMPROVEMENT IN THE SSNB GROUP
17% IMPROVEMENT IN THE PLACEBO GROUP

SHOULDERFUNCTION: NO DIFFERENCE

JONES

15 PATIENTS TREATED WITH IA ARTICULAR TRIAMCINOLONE AND 15 PATIENTS WITH SSNB WITH BUPIVACAINE AND TRIAMCINOLONE

AT 3 MONTHS THE NERVE BLOCK PATIENTS SHOWED GREATER RELIEF IN PAIN AND BETTER SHOULDER RANGE OF MOTION

THESE 2 INVESTIGATIONS **SUGGEST** PROMISE FOR SSNB . THE EXACT THERAPEUTIC MECHANISMS REMAIN UNCLEAR

LARGER STUDIES ARE NEEDED

HYDRODILATION OR BRISEMENT

THIS INVOLVES INCREASING INTRACAPSULAR PRESSURE AND EXPANDING CAPSULAR VOLUME THROUGH INJECTION OF FLUID UNTIL CAPSULAR RUPTURE.

IT CAN BE DONE UNDER LOCAL ANESTHETIC AND TAKES 15 MINUTES TO COMPLETE

VARIOUS LIQUIDS HAVE BEEN USED AND THE PROCEDURE CAN BE DONE IN CONJUNCTION WITH ARTHROGRAPHY

A COCHRANE DATABASE REVIEW WAS UNABLE TO DRAW CONCLUSIONS BECAUSE OF SMALL NUMBERS

MUA MANIPULATION UNDER ANESTHESIA

POSSIBLE COMPLICATIONS

HUMERAL FRACTURE, SUBSCAPULARIS RUPTURE,
LABRAL TEARS, LESIONS TO THE BICEPS TENDON.

DODENHOFF

39 SHOULDERS IN STAGE 2

MEAN CONSTANT SCORES IMPROVED FROM 24 TO
63 AT 3 MONTHS AND 69 AT 6 MONTHS

94% OF PATIENTS SATISFIED AT FINAL FOLLOW UP

VERY QUICK REGAINING THE ABILITY TO DO ADL TASKS

FARELL

**REPORTED ON THE LONG-TERM RESULTS OF MUA
AND SHOWED SUSTAINED IMPROVEMENT IN BOTH
PAIN AND MOTION (LEVEL III EVIDENCE)**

**19 SHOULDERS MAINTAINED IMPROVEMENT IN
MOTION AT 15 YEARS FOLLOW-UP**

ARTHROSCOPY

THERAPEUTIC SYNOVECTOMY

RELEASE OF THE SUPERIOR GLENOHUMERAL LIG.

RELEASE OF THE SUBSCAPULARIS

DEBRIDEMENT OR DIVISION OF THE JOINT CAPSULE

IT HAS BECOME THE MOST POPULAR METHOD

OF TREATING ADHESIVE CAPSULITIS

POLLACK

**83 % SATISFACTORY RESULTS WHEN DEBRIDEMENT
WAS DONE IN CONJUNCTION WITH MUA.**

OGILVIE-HARRIS

**17 OF 20 PATIENTS TREATED WITH DIVISION HAD NO
FUNCTIONAL DEFICIT COMPARED TO ONLY 9 OF 20
IN THE MUA GROUP.**

HOW MUCH OF THE CAPSULE SHOULD BE RELEASED

REMAINS A MATTER OF DEBATE.

AUTHOR'S PREFERRED METHOD

STAGE 1 AND 2

INTRA-ARTICULAR STEROIDS

ORAL NSAID

PHYSICAL THERAPY SHOULD FOCUS ON RE-ESTABLISHING PROPER SCAPULOHUMERAL RYTHM

OTHER MODALITIES ARE USED TO RELIEVE PAIN SUCH AS IONTOPHORESIS,CRYOTHERAPY AND TENS

HOME THERAPY FOCUSES ON PASSIVE RANGE OF MOTION AND PENDULUM EXERCISES

STAGE 3 AND 4

NO MORE CORTICOSTEROID INJECTIONS

AGGRESSIVE STRETCHING / PROLONGED ,LOW-LOAD
STRETCHING IS MORE EFFECTIVE THAN BRIEF,
HIGH-LOAD STRETCHING

**PATIENTS WHO ARE REGRESSING DESPITE APPRO-
PRIATE THERAPY ARE LIKELY TO REQUIRE SURGICAL
INTERVENTION / WE WAIT A MINIMUM OF 4 MONTHS
FROM THE ONSET OF SYMPTOMS TO OFFER A
SURGICAL SOLUTION**

TAKE HOME MESSAGES

THE TREATMENT OF ADHESIVE CAPSULITIS REMAINS CONTROVERSIAL DESPITE AN ABUNDANCE OF PUBLISHED LITERATURE.

HYDRODILATION AND SUPRA SCAPULAR NERVE BLOCKS HAVE BEEN REPORTED TO BE SUCCESSFUL BUT STUDIES ARE LIMITED BY SHORT FOLLOW-UP AND SMALL NUMBERS.

THERE IS EXTENSIVE EXPERIENCE WITH MUA.

ARTHROSCOPIC DIVISION OF THE CAPSULE IS PREFERRED TO MUA BECAUSE IT ALLOWS A MORE PRECISE RELEASE.

GLUCOSAMINE BIJ ARTROSE

BRITISCH MEDICAL JOURNAL 2010;341:c4675

META-ANALYSE VAN GERANDOMISEERDE STUDIES
BIJ PATIENTEN MET HEUP OF KNEIARTROSE.

GLUCOSAMINE ALS SULFAAT OF HYDROCHLORIDE
AAN 1,5 GRAM PER DAG

AL DAN NIET IN COMBINATIE MET CHONDROITINE
AAN 800 mg TOT 1,2 GRAM PER DAG

STATISTISCH SIGNIFICANTE MAAR MINIMALE
VERBETERINGEN OP DE PIJNSCHAAL.

DE VERBETERING IS ECHTER VEEL MINDER UITGE-
SPROKEN DAN WAT ALS KLINISCHE RELEVANTIE
WAS VOOROPGESTELD.

STUDIES GEFINANCIERD DOOR EEN FARMACEUTISCH
BEDRIJF VONDEN STEEDS EEN BETER RESULTAAT
DAN NIET GEFINANCIERDE STUDIES.

JAMA 2010 ;304:45-52

GERANDOMISEERDE ,DUBBELBLINDE STUDIE
BIJ PATIENTEN MET LUMBALE ARTROSE.

PLACEBO VERSUS GLUCOSAMINESULFAAT 1,5 GRAM
PER DAG GEDURENDE 6 MAANDEN.

GEEN VOORDEEL VAN GLUCOSAMINE OP » DE PIJN
GERELATEERDE INVALIDITEIT « T.O.V. PLACEBO.

BESLUIT VAN DEZE 2 RECENTE STUDIES

GEEN DUIDELIJK POSITIEF EFFECT VAN GLUCOSAMINE TEN OPZICHTE VAN PLACEBO BIJ ARTROSE PATIENTEN.

DE ONGEWENSTE EFFECTEN VAN GLUCOSAMINE ZIJN NIET MEER UITGESPROKEN DAN VAN EEN PLACEBO.

SYSTEMISCHE CORTICOIDEN BIJ LUMBO-ISCHIALGIE?

META-ANALYSE VAN ALLE RCT's VERSCHENEN IN
DE DATABASES COCHRANE, EMBASE EN MEDLINE.

7 WEERHOUDEN RCT's WAARIN EEN SYSTEMISCHE
CORTICOIDENBEHANDELING WERD VERGELEKEN
MET PLACEBO.

IN TOTAAL 383 PATIENTEN

EVALUATIE VIA VAS-SCHAAL, VERDERE CHIRURGIE,
HET GEBRUIK VAN ANALGETICA EN EEN FUNCTIONELE
SCORE HIER ROLLAND MORRIS.

ER WERD GEEN SIGNIFICANT VERSCHIL GEVONDEN
TUSSEN DE CORTICOIDENGROEP EN DE PLACEBO-
GROEP VOOR DE VERSCHILLENDE PARAMETERS.

MEER BIJWERKINGEN IN DE CORTICOIDENGROEP

BESLUIT

**CORTICOIDEN ZIJN NIET STERKER WERKZAAM
DAN PLACEBO BIJ ACUTE LUMBO-ISCHIALGIE
EN GEVEN MEER BIJWERKINGEN.**

ZIJ ZIJN NIET NUTTIG BIJ DEZE INDICATIE!!!!!!

ROTATOR CUFF TEARS ARE THE MOST FREQUENT TENDON INJURY IN THE ADULT POPULATION.

HOWEVER, THE NATURAL HISTORY OF NON-OPERATIVELY TREATED FULL-THICKNESS TEARS IS POORLY DEFINED.

PURPOSE OF THE STUDY

TO EVALUATE USING ULTRASOUND THE SIZE CHANGE OVER 2 TO 3 YEARS FOLLOW-UP.

INCLUSION CRITERIA

FULL-THICKNESS ROTATOR CUFF TEARS WITH TEAR SIZE BETWEEN 5 AND 40 mm. NON SURGICALLY TREATED.

51 PATIENTS WITH 61 TEARS

35 TO 60 YEARS OLD (MEAN 54 YEARS)

RANGE OF TEAR 5 mm TO 39 mm (MEAN 12 mm)

25 TO 39 MONTHS FOLLOW-UP (MEAN 29 MONTHS)

INTRAOBSERVER VARIATION

A CHANGE OF 5 mm IN TEAR SIZE SHOULD BE

CONSIDERED CLINICALLY SIGNIFICANT.

FOLLOW UP ULTRASOUND

51 PATIENTS AND 66 TEARS (5 NEW TEARS FOUND)

RANGE 5 mm TO 50 mm (MEAN 19 mm)

30/61 49% INCREASED BY 5 mm OR MORE

26/61 43% DID NOT CHANGE

5/61 8% DECREASED BUT NO TEAR HAD HEALED

!!!!!!!!!!!!!!!!!!!!

27/51 53% REPORTED A TRAUMATIC EVENT AT THE
TIME OF FOLOW UP. (SIZE OF THE EVENT???)

NO CORRELATION WAS FOUND

BETWEEN THE CHANGE IN TEAR AND

AGE OF THE PATIENT

SEX

EXISTENCE OF A PRIOR TRAUMA

SIZE OF THE TEAR

CORRELATION WAS FOUND

BETWEEN THE EXISTENCE OF CONSIDERABLE PAIN
AT FOLLOW UP AND AN INCREASE IN TEAR SIZE.

CONCLUSION

FULL-THICKNESS ROTATOR CUFF TEARS TEND TO INCREASE IN SIZE IN ABOUT HALF OF THE PATIENTS.

PATIENTS TREATED NONOPERATIVELY SHOULD BE ROUTINELY MONITORED FOR TEAR SIZE INCREASE ESPECIALLY IF THEY REMAIN SYMPTOMATIC.

**ALTHOUGH THE SYMPTOMS MAY SUBSIDE IT IS
GENERALLY ACCEPTED THAT FULL-THICKNESS
TEARS DO NOT HEAL.**

YAMAGUCHI (2001)

23 PATIENTS WITH MEAN AGE 70 YEARS. AFTER A 5
YEAR PERIOD 39% OF THE TEARS INCREASED BY
MORE THAN 5 mm WHILE NO CUFF HAD HEALED.

MAMAN (2009)

MRI IN 33 PATIENTS PERFORMED AT LEAST 6 MONTHS
APART. 52% HAD AN INCREASE IN SIZE, 36% HAD NO
CHANGE, 12% HAD DECREASED, 0% WAS HEALED