Welcome from Simon Moyes

Simon specialises in arthroscopic and minimally invasive treatment for problems of the knee, shoulder, foot and ankle.

Simon Moyes specialises in keyhole – or arthroscopic – surgery. This is a highly sophisticated, minimally invasive technique which means you spend less time in hospital and you are more likely to have a quick recovery.

Click here to find out more about Simon

More about Simon’s weekly diary

Treatment Areas

Mr Simon Moyes offers surgical treatment for problems in these areas of the body:

- Knee
- Shoulder
- Foot
- Ankle

Treatment Query/Search

Go straight to the specific condition you are looking for by using the drop down below:

Specific condition

Ankle Arthroscopy site

Enquiry Line +44 (0)207 323 0040
Information on shoulder arthroscopy for patients and medical professionals alike.

Simon Moyes and Omar Haddo specialise in arthroscopic surgery.

This site is dedicated to conditions of the shoulder joint that are treated by Simon and Omar. Patients can find all the information they need about some of the more common shoulder problems, while surgeons and medical professionals can find a range of up-to-date medical resources for anyone involved in or studying shoulder arthroscopy.

Read more about the site

Featured Video

Patients Site

An outline of common shoulder problems, with information about symptoms, causes, and the treatment or surgery that may be required.

Surgeons Site

A comprehensive resource covering all aspects of Shoulder Arthroscopy for medical professionals.

Go to Patients Site

Go to Surgeons Site

View more videos
Glenohumeral & Acromioclavicular Instability

Presented by Mr. Simon Moyes
Introduction

Papyras 3000 BC
Hippocrates 460 BC Traction plus heel in axilla
1900s non anatomical procedures developed
  Bone grafting of glenoid
  Tendon and bone transfers
  High recurrent instability rates
Putti, Bankart, Platt and Bristow 1939
  Successful
  Limited mobility = price to pay
Arthroscopy 1980s
  Precise pathologies identified
Laxity – Degree of asymptomatic translation

Instability – Abnormal symptomatic motion producing:
- Pain
- Subluxation
- Dislocation
Glenohumeral Instability

(A) Degree of instability
1. Dislocation = complete separation of glenohumeral surfaces
2. Subluxation = Symptomatic separation of surfaces without dislocation

(B) Chronicity of instability
1. Acute instability caused by acute symptomatic traumatic shoulder dislocation
2. May improve with time or progress to recurrent chronically unstable shoulder
Glenohumeral Instability

(C) Volition of instability
2. Involuntary (more common) muscle patterning component
3. Voluntary can progress to involuntary with the unbalanced muscle action becoming ‘deeply ingrained’.

(D) Direction of instability
1. Bankart Lesion 1939 unidirectional anterior instability (most common)
2. Neer 1980s multidirectional instability (MDI)
3. True MDI should have both anterior and posterior instability with an inferior component.
Aetiology of Instability

(A) Distinction critical in selection of treatment

(B) Rowe 1963
1. 96% traumatic
2. 4% atraumatic
Thomas and Matsen Classification 1989

TUBS – Traumatic
Undirectional Bankart
Lesion treated with
surgery

AMBRI – Atraumatic
multidirectional Bilateral
treated with
rehabilitation +/-
Capsular shift/ closure
of rotator interval
Stanmore Classification

When assessing treatments for patients, the patients are classified into three polar groups: Type I (True TUBS), Type II (True AMBRI), or Type III (Muscle patterning disorders/Habitual non-structural). In using this system over the years it has been made aware that there is a continuum between these polar groups with some patients falling in between. It is found that the best model in which to capture these cases is in the form of a triangle with the polar groups at each corner.

The system therefore:
• Takes into account the shifting nature of the pathology in shoulder instability.
• Allows patients to be positioned between the poles.
• Incorporates a gradation from traumatic to atraumatic causes.
• Incorporates a gradation from muscle patterning to purely structural causes.
Stanmore Classification

The benefits of this system are:

The triangle system does provide a means of classifying all presentations of shoulder instability with a unifying system.

- It allows for a shift in the pattern of instability with time.
- It is a simple system to implement and easy to remember.
- It provides a route for treatment of all the varieties of instability
### Stanmore Classification

**Table 2** Demonstrates the characteristics of the subgroups.

<table>
<thead>
<tr>
<th>Pathology</th>
<th>Group I (I)</th>
<th>Group II (I)</th>
<th>Group I (III)</th>
<th>Group III (I)</th>
<th>Group II (III)</th>
<th>Group III (II)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trauma</td>
<td>++</td>
<td>+</td>
<td>+</td>
<td>+ / -</td>
<td>+ / -</td>
<td>+ / -</td>
</tr>
<tr>
<td>Articular surface damage</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>(Humeral head and/or glenoid rim)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Muscle patterning</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes*</td>
<td>Yes</td>
</tr>
</tbody>
</table>

*BUT* apparent on functional EMGs.
Principles of treatment

(a) History
(b) Examination
(c) Investigation

1. EUA
2. Imaging MRI- CT
3. Arthroscopy
4. Functional EMG
Polar Group 1
(traumatic structural instability)

• Anterior structural instability the most common 90%
  • 2% of the population
  • 88 - 95% recurrence under age 20 years
  • 14% recurrence over 40 years
• ‘Gold standard’ Bankart 1939
  • Restore detached labrum
  • Reattaching IGHL
• Rockwood 1978
  • 97% stability at 5 years
  • Open vs Arthroscopic
Polar Group II and III

- Define whether structural or non structural
- Assess muscle patterning and direction of instability
- Abnormal muscle patterning
  - EMGs
  - Bio-feedback
    - Joint position sense
    - Muscle movement patterns
    - Closed circuit TV
- Surgery only
  - Definite structural component
    - Bone
    - Labral
    - Capsular
Surgery

• Arthroscopy best way to assess structural damage.

• Identifies subtle humeral head and labral defects. Vital in difficult cases.

• A Hill Sachs (Broca) lesion can occur in 80% of patients with recurrent instability at arthroscopy compared to only 47% of Hill Sachs lesion diagnosed radiologically.
Arthroscopic repair has potential advantages:

- Improved cosmesis
- Less postoperative pain
- Shorter operative time
- Decreased blood loss
- Better preservation of external rotation
- Avoidance of subscapularis related complications.

Recurrence rates as low as 5% are reported.
Patient Selection

Arthroscopic

Optimal candidates have a discreet Bankart lesion with no capsular laxity or concomitant intra-articular pathology.

Open

Patients who require open repairs are those with significant capsular problems, capsular laxity, bony Bankart lesion, glenohumeral arthritis, associated rotator cuff tear, or poor tissue quality.
Arthroscopy, Bursoscopy, EUA and Arthroscopic Stabilisation – Right Shoulder
Arthroscopy, Bursoscopy, EUA and Arthroscopic Stabilisation – Right Shoulder
Arthroscopy, Bursoscopy, EUA and Arthroscopic Stabilisation – Right Shoulder
Video of Arthroscopic Anterior Stabilisation
Clavicle Injuries

"Relax - it's probably just dislocated."
Clavicle anatomy

- S – shaped bone with varying cross section
- Superficial
- Only bony link of upper limb to axial skeleton
- Strut of shoulder joint
- Muscle attachment

Movement:
- Superior-inferior
- Anterior-posterior
- Rotational
Sports Injuries

• Increasing numbers seen:
  • More people involved in sports
  • Excessive training
  • All year schedules
  • Improper techniques
  • Lack of equipment

Can result in:
• Time away from sports
• End of athletic career
• Life-long disability
AC joint dislocations

• Diagnosis:
  • Clinical

• Radiological (stress views, axillary views, comparison with normal shoulder)
AC joint dislocations

The Rockwood Classification
AC joint dislocations

Treatment
I-II: conservative
   27% persistent pain
   Injection, surgery

IV-VI: surgical

III: ???
Type III

Meta-analysis: 1172 patients

<table>
<thead>
<tr>
<th></th>
<th>Surgery</th>
<th>Conservative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Satisfactory Outcomes</td>
<td>88%</td>
<td>87%</td>
</tr>
<tr>
<td>Complications</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Further Surgery</td>
<td>59%</td>
<td>6%</td>
</tr>
<tr>
<td>Infection</td>
<td>6%</td>
<td>1%</td>
</tr>
<tr>
<td>Deformity</td>
<td>3%</td>
<td>37%</td>
</tr>
<tr>
<td>Pain and Function</td>
<td>Equal</td>
<td>Equal</td>
</tr>
</tbody>
</table>

But surgery included the use of Hook plates and Bosworth screws!
Type III

Schlegel:

20% Type III dissatisfied with conservative treatment
Type III Treatment

Acute vs Chronic
Treatment of Chronic Type III Injuries

• **Autograft**
  - CA ligament only represent 20% of ultimate load of CC ligament

• **Allograft**
  - Technically easier
  - Increased Strength
  - Smaller scars

Coraco-clavicular augmentation increases load to failure
  - Tension band, hook plates,
  - bosworth screw, surgilig, tightrope,
  - PDS cord
Treatment

Acute:

- Age
- Hand dominance
- Occupation
- Hobbies and sport
- Risks of re-injury

- CC ligament repair/augmentation

- Tightrope, surgilig, etc
Treatment

Chronic:

• Modified Weaver Dunn – CA Ligament transfer
• Open vs. arthroscopic
• Autograft vs. Allograft
Audit 2010 – Arthrex tightrope offers satisfactory outcome for ACJ stabilisation (Lower complication rates and lower rate of further surgery)

Complications of fixation devices
Tightrope Hook Plates
Arthrex Surgical Animation Video for ACJ Reconstruction
Thank you for your attention!

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www.simonmoyes.com