National Knee Injury Survey

Section 1 – Management of acute haemarthrosis

There are several possible diagnoses for an acute haemarthrosis of the knee. In this section we would like to know if and how you deal with this clinical finding in your practice.

Q 1.1 If you were to see a patient with acute haemarthrosis of the knee in your current practice (either in your clinic or in the Emergency Department), would you (please tick one):
1. Determine a specific diagnosis yourself and follow-up that patient’s care?
2. Determine a specific diagnosis yourself but refer that patient to another surgeon for follow-up?
3. Refer that patient to another surgeon without determining a specific diagnosis? (If so please go to Q6.1 to complete this questionnaire)
4. Other (please specify) ____________________________________________

Q 1.2 Which of the following items do you routinely use (i.e. on every patient) in your investigation to determine a diagnosis for an acute haemarthrosis of the knee? (please tick as many as applicable)
1. History
2. Clinical examination
3. Plain radiographs
4. Arthrogram
5. Magnetic Resonance Imaging
6. Arthroscopy
7. Other (please specify) ________________________________

Q 1.3 In what clinical situations do you use Magnetic Resonance Imaging as an aid to determine the diagnosis for an acute haemarthrosis? (please tick as many as applicable)
1. Routinely
2. Locked knee
3. Possibility of associated damage
4. Never
5. MRI is not available
6. Other (please specify) _________________________________________
Q 1.4 In what clinical situations do you use arthroscopy as an aid to determine the diagnosis for an acute haemarthrosis? (please tick as many as are applicable)

1. Routinely
2. Locked knee
3. Possibility of associated damage
4. If MRI is not available
5. Never
6. Other (please specify)

Section 2 – Management of acute ACL injury

One diagnosis for an acute haemarthrosis of the knee is an acutely torn Anterior Cruciate Ligament (ACL). Initial conservative management versus immediate repair/reconstruction is still debated in the literature. We would like to know what your approach to managing this injury is.

Q 2.1 After determining a diagnosis of an acute ACL insufficiency in a patient, do you (please tick one)

1. Deal with the patient’s care yourself?
2. Refer that patient to another surgeon? (if so please go to Q 3.1)
3. Other? (please specify)

Please consider the following clinical scenario and answer the relevant questions:

A 22 year old university soccer player is referred to your clinic. Five days ago during a game, he was running down the field and pivoted quickly to intercept the ball. He states that he heard and felt a ‘pop’ in his knee after which he fell with pain. He wishes to continue playing competitive soccer. Your diagnostic routine determines that he has a mid substance tear of the ACL with no meniscal tear.

Q 2.2 What would be your initial recommendation to this patient? (please tick one)

1. ACL repair and/or reconstruction
2. Rehabilitation and ACL brace prescribed for sports (if so please go to Q 2.4)
3. Other (please specify)
Q 2.3 A. If you recommend surgery, would you (please tick one)

1. Operate based on the patient having full ROM, even if it means immediately?
2. Operate irrespective of ROM?
3. Delay surgery for a certain period of time, even if the patient has full ROM on initial assessment?

Q 2.3 B. What type of surgery would you most likely perform? (please tick one)

1. Surgical repair only
2. ACL reconstruction using Bone-Patella Tendon-Bone (B-PT-B) autograft
3. ACL reconstruction using Bone-Patella Tendon-Bone (B-PT-B) allograft
4. ACL reconstruction using Semitendinosis/Gracilis (ST/G) autograft
5. ACL reconstruction using Semitendinosis/Gracilis (ST/G) allograft
6. Other (please specify)

Q 2.3 C. Do you use ligament augmentation such as cortex or propylene braid, in your reconstruction? (please tick one)

1. Yes
2. No

Q 2.3 D. Do you currently incorporate the residual ACL stump in your reconstruction? (please tick one)

1. Yes, because
2. No

Q 2.4 Please consider again the clinical scenario at the beginning of section 2. Would your initial recommendation for this type of injury change for the following selections? Please choose one of the following three options:
A. ACL repair/reconstruction
B. ACL reconstruction after physis closed
C. Rehabilitation and/or ACL brace

A  B  C

1. A female patient
2. A recreational soccer player
3. An 18-year old non-athlete
4. An 8-year old
5. A 14-year old with open physis
6. A recreational tennis player over 45 years of age
Q 2.4 If the injury were a partial tear of the ACL, what would your initial recommendation be for the following selections? Please choose out of the following options:
A. ACL reconstruction
B. Rehabilitation and/or ACL brace
C. Other (Please specify)

1. The patient has ‘giving way’ episodes with pivoting manoeuvres
2. The patient does not have ‘giving way’ episodes

Section 3 – Management of chronically insufficient knee

The treatment of the chronically insufficient ACL in patients is debatable. The decision must be made to treat the patient surgically or non-surgically. If the surgical route is chosen then the type of procedure must be determined. In this section we would like to know the decisions that you make.

Q 3.1 If you were to see a patient in either the clinic or the Emergency Department that you suspect has a chronically insufficient ACL, do you (please tick one)
1. Deal with the patient yourself?
2. Refer the patient to another surgeon? (If yes, please go to Q 6.1 to complete the questionnaire)
3. Other? (please specify)______________________________

Please consider the following clinical scenario and answer the relevant questions.

A 22-year old university soccer player is referred to your clinic. Last month, during a game, his knee ‘gave way’ as he pivoted on the field to intercept the ball. He recalls an original pivoting episode about one year ago when he developed an acute haemarthrosis. He wishes to continue playing competitive soccer. Your diagnostic routine determines that he has an ACL insufficient knee with no meniscal tear.

Q 3.2 What is your recommendation to this patient? (please tick one)
1. ACL reconstruction
2. Rehabilitation and/or ACL brace prescribed (If yes, please skip Q 3.3)
3. Other (please specify)
Q 3.3. A. If you recommend surgery, which reconstruction would you like to perform? (please tick one)

1. ACL reconstruction using Bone-Patella Tendon-Bone (B-PT-B ) autograft
2. ACL reconstruction using Bone-Patella Tendon-Bone (B-PT-B ) allograft
3. ACL reconstruction using Semitendinosis/Gracilis (ST/G ) autograft
4. ACL reconstruction using Semitendinosis/Gracilis (ST/G ) allograft
5. Other (please specify)

Q 3.3. B. Do you use ligament augmentation such as gortex or propylene braid, in your reconstruction? (please tick one)

1. Yes
2. No

Q 3.4 Please consider again the clinical scenario at the beginning of section 2. Would your initial recommendation for this type of injury change for the following selections? Please choose one of the following three options:
A. ACL repair/reconstruction
B. ACL reconstruction after physes closed
C. Rehabilitation and/or ACL brace

1. A female patient
2. A recreational soccer player
3. An 18-year old non-athlete
4. An 8-year old
5. A 14-year old with open physes
6. A recreational tennis player over 45 years of age

Section 4 – Management of failed conservative treatment

At certain times initial non-surgical, conservative measures for the ACL insufficient patient fail and dealing with these situations may be difficult. In this section, we would like to know how you treat these patients.

Please consider the following clinical scenario and answer the relevant questions.

A 22-year old university soccer player with a two year history of ACL insufficiency treated conservatively is referred to your clinic. During a game, his knee ‘gave way’ in his ACL brace when he quickly went to intercept the ball. He states that this is the third time this season and he wishes to continue playing competitive soccer. There are no signs of a torn meniscus.

Q 4.2 What is your recommendations to this patient?
1. ACL reconstruction
2. Further rehabilitation and a new ACL brace prescribed
3. ‘Nothing more can be done’ (please go to Q 4.4)
4. Other (please specify) ______________________

Q 4.3. A. If you recommend surgery, which reconstruction would you like to perform? (please tick one)

1. ACL reconstruction using Bone-Patella Tendon-Bone (B-PT-B) autograft
2. ACL reconstruction using Bone-Patella Tendon-Bone (B-PT-B) allograft
3. ACL reconstruction using Semitendinosis/Gracilis (ST/G) autograft
4. ACL reconstruction using Semitendinosis/Gracilis (ST/G) allograft
5. Other (please specify) ______________________

Q 4.3. B Do you use ligament augmentation such as gortex or propylene braid, in your reconstruction? (please tick one)

1. Yes
2. No

Q 4.4 Please consider again the clinical scenario at the beginning of section 2. Would your initial recommendation for this type of injury change for the following selections? Please choose one of the following three options:
A. ACL repair/reconstruction
B. ACL reconstruction after physes closed
C. Rehabilitation and/or ACL brace

1. A female patient
2. A recreational soccer player
3. An 18-year old non-athlete
4. An 8-year old
5. A 14-year old with open physes
6. A recreational tennis player over 45 years of age

Section 5- Influence of patient factors on ACL surgery

There are several patient factors that may affect your decision to perform surgery or influence the type of ACL reconstruction you perform. In this section we would like to know how these factors are utilized in your decision.

Q 5.1 A 1. Do you consider age, by itself, to be an important factor in your decision to perform ACL surgery? (please tick one)

1. Yes (continue on Q 5.1 A 2)
2. No (please go to Q 5.1 B 1)
A 2. If you do consider age important, what is the age at which you would recommend treatment other than surgery? (please specify)

B 1. Do you consider age, by itself, to be an important factor in determining the type of surgery you perform? (please tick one)

1. Yes (please continue on Q 5.1 B 2)
2. No (please go to Q 5.2)

B 2. If you do consider age important, what is the age at which you would perform a different type of surgery? (please specify)

B 3. What type of surgery would you now perform? (please specify)

Q 5.2

A. Is the degenerative state of the knee a factor in your decision to perform ACL surgery for each of the following levels of classification? (please tick one for each category)

Yes          No

1. Patello-femoral chondromalacia but no x-ray evidence of osteoarthritis
2. Moderate degree of osteophyte formation and/or joint space narrowing
3. Severe to complete joint space narrowing and/or flattening of the condyles

B 1. Is the degenerative state of the knee a factor in determining the type of surgery you perform for each of the following levels of classification? (please tick one for each category)

Yes          No

1. Patello-femoral chondromalacia but no x-ray evidence of osteoarthritis
2. Moderate degree of osteophyte formation and/or joint space narrowing
3. Severe to complete joint space narrowing and/or flattening of the condyles

**B2** If you do consider the degenerative state of the knee a factor, how would you change the type of surgery you perform for each of the following levels of classification? (please specify for each category)

1. Patello-femoral chondromalacia but no x-ray evidence of osteoarthritis
2. Moderate degree of osteophyte formation and/or joint space
3. Severe degree of joint space narrowing and/or flattening of the condyles

**Q 5.3 A.** Is the anatomical alignment (varus/valgus) a factor in your decision to perform ACL surgery? (please tick one)

1. Yes
2. No

**B.** Is the anatomical alignment (varus/valgus) a factor in determining the type of surgery you perform? (please tick one)

1. Yes
2. No

**Q 5.4 A.** Are clinical signs and symptoms of patello-femoral pain factors that you consider in your decision to perform ACL surgery for each of the levels of classification below? (please tick one for each category)

<table>
<thead>
<tr>
<th>Level</th>
<th>Yes</th>
<th>No</th>
</tr>
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<tbody>
<tr>
<td>Mild</td>
<td></td>
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<tr>
<td>Moderate</td>
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<tr>
<td>Severe</td>
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**B.1.** Are clinical signs and symptoms of patello-femoral pain factors that you consider in determining the type of ACL surgery you perform for each of the levels of classification below? (please tick one for each category)

<table>
<thead>
<tr>
<th>Level</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mild</td>
<td></td>
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<tr>
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<tr>
<td>Severe</td>
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</tbody>
</table>
B.2. What type of surgery would you perform for each of the levels of classification below? (please specify)

1. Mild
2. Moderate
3. Severe

Q 5.5 A. Please state any other factors you consider important in your decision to perform ACL surgery.

________________________________________________________________________

B. Please state any other factors you consider important in determining the type of ACL surgery you perform.

________________________________________________________________________

Section 6-General evaluation

In this section we would like to know some general information about your practice and specialty training. This is to be used for demographic interest only.

Q 6.1 Approximately how many diagnoses of ACL insufficiency (acute or chronic) did you make in 2000?

________________________________________________________________________

Q 6.2 Approximately how many ACL reconstructions did you perform in 2000?

________________________________________________________________________

Q 6.3 Which registrar training did you attend?

________________________________________________________________________

Q 6.4 A. Did you complete a fellowship?

1. Yes
2. No

B. If yes, where did you do your fellowship?

________________________________________________________________________

Q 6.5 A. Are you currently affiliated with an academic centre?
1. Yes
2. No

B. If yes, which institution?

_____________________________________

Please add your comments to this questionnaire here....

_____________________________________

_____________________________________

Thank you for your time and patience in filling in this questionnaire!