Diagnosis of Meniscal Disease and Meniscal Treatment

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Meniscus

• Anatomy

Meniscus

• Function

Shrive et al. 1978

Meniscal Injury

• Diagnosis
  – Clinical
    • „meniscal click”
    • Lameness
  – Ultrasound
    • ?
    • C. Cook - Giessen
  – MRI


Meniscus

• Classification of tears

Meniscal Injury

• Diagnosis
  – MRI
Meniscal Injury

• Diagnosis
  – Arthroscopy
  – Mini-Arthrotomy
  – “Slocum”-medial meniscal release
  – Probing

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Arthroscopy - Arthrotomy

<table>
<thead>
<tr>
<th></th>
<th>Arthroscopy</th>
<th>Arthrotomy</th>
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<tbody>
<tr>
<td>Probing</td>
<td>85.0%</td>
<td>67.0%</td>
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<tr>
<td>Arthroscopy</td>
<td>87.0%</td>
<td>83.0%</td>
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<tr>
<td>Arthrotomy</td>
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<tr>
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<tr>
<td>Arthroscopy</td>
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</tbody>
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Less morbidity with arthroscopy

Arthroscopy

– Technically demanding
– Fat pad
– Partial/complete rupture of ACL
– distractor

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Subsequent meniscal tear after arthroscopy: 20.0% (no difference to arthroscopy)
Meniscal Injury

- Treatment
  - Resection
  - Release
  - Suture
    - Experimental study in 43 dogs
    - Longitudinal tear -> suture
    - Only fibrous tissue after 12 weeks
    - 80% of strength (opposite site)


Meniscal Injury

- Treatment
  - Resection
    - Entire meniscus
    - Caudal horn
    - Injured part

Meniscal Treatment

- Release

- Miniarthroscopy caudal of medial collateral ligament

Meniscal Injury

- Treatment
  - New techniques
    - SIS
    - Tendons, etc.
    - Gene therapy


Questions?