Endoscopic Treatment of External Snapping Hip Evaluation of New Technique

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Definition of External Snapping Hip (ESH)

„Friction and snapping of iliotibial band over great trochanter caused by its contraction or loss of balance between ITB and great trochanter”

Hypothesis
Are in some cases of ESH gluteus maximus aponeurosis with its trochanteric lamina and scared anterior muscle fibers most important factor of syndrome development?

Symptoms
Snapping during flexion and adduction of the hip

- the more flexion is needed to call snapping the more posteriorly constricted tissue are (gluteus muscle)

- symptoms with extended knee – more ITB

- symptoms with flexed knee - more gluteus

- pain over trochanter when inflammation of bursa exists
Predisposing factors

- Scars formation around gluteal fascia - injections
- Legs discrepancy
- Asymmetry of pelvis
- Increased muscles tension – spine problems
- Trochanter deformities
- Forced position
  - increasing friction
  - disturbing muscles balance (e.g. biking)
- Adductor tears (gluteus medius)

Indications

- Painful snapping
- No improvement after rehab
- Adductors tear
- Massive bursa inflammation
- 23 consecutive cases (19 women)
- Ultrasound confirmation of constricted area
- Follow up 12 - 27 months
- Hospitalisation same day / 1 night
- 90 degrees of flexion and painfree walking in first postop day
- Painkillers only 1st post op day
- Rehab since 1 postop day
- Full weight bearing 2 – 3 postoperative day
- Intraoperative snapping check
Lateral decubitus

Full flexion and internal rotation possible during procedure

Two standard portals 3 – 5 cm proximal and distal to troch

30° arthroscope no cannulas, stright bipolar, shaver

Longitudinal ITB release proximal to muscle fibers of tensor distal to gluteus maximus insertion

Posterior perpendicular / transvers cut 5 - 10cm only deep tendinous portion – „complete white release”

Oblique postero – superior and postero – inferior cut cut if hip still snapping

Intraoperative snapping check

No tissue excision
Results

MAHORN Hip Outcome Tool (MHOT\textsuperscript{14})
Quality of Life Questionnaire for Young, Active Patients with Hip Problems

1. Symptoms and Functional Limitations
2. Sports and Recreational Activities
3. Job related concerns
4. Social, Emotional and Lifestyle Concerns

<table>
<thead>
<tr>
<th>Involved structures</th>
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<tbody>
<tr>
<td>7 cases - ITB</td>
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<tr>
<td>12 gluteus fascia + ITB</td>
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<tr>
<td>3 gluteus fascia</td>
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<tr>
<td>1 ITB + gluteus fascia + gluteus medius tear</td>
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Length of posterior cut / release
- in 15 cases more than 7 cm, max – 9 cm

Return to desired activity
- mean time 8 weeks

Full adduction and internal rotation in all cases

No recurrences in follow up

Before | Follow up
-------|--------
40     | 93
56     | 91
67     | 96
37     | 94
Observations

Difficulties

- haematoma and its evacuation 2
- buttocks asymmetry 4
- transitional trochanter area numbness and palpation pain 1

Tips

- percutanus needles for initial orientation
- meticulous heamostasis of fat tissue vessels
- fast procedure – tissue swelling
- immediate stretching and normal gait pattern exercises
- visualisation !!!
- „more pain more blood”
Conclusions

1) Most of our cases showed **gluteus maximus tissue involvement** that demanded its release

2) Our technique is reproducible and reliable procedure that allows for **safe release** of contractured structures in same day surgery

3) Postoperative **buttocks asymmetry** happens after endoscopic treatment of external snapping hip
References


