Synovial fistula after release of A1 pulley for Trigger finger

Orbach H, Rinott M, Wolovelsky A, Rozen N.

Department of Orthopedics, "Haemek" Medical Center, Afula.
Synovial fistula after release of A1 pulley for Trigger finger: 2 case studies
#1

Male, 62 yrs
Medical Hy - Dyslipidemia, Obesity, HTN
Relevant Hy- Few months complaints of limited ROM 4th finger Lt hand
Dx - Trigger finger
Tx - NSAID and steroids injection –no improvement
Sequence of events

- 24/7/2008- Open release of A1 pulley
- POD 7- Normal ex, removal of stitches.
- POD 28- Wound still open, serotic discharge, no signs of wound infection, no granular tissue.
- **Dx-Tenosynovial fistula**
- POD 30- Second operation.
2 months - Wound closed, limited ROM
Today

- Full range of motion
- Minimal scar
- No pain
#2

Female, 62 yrs
Medical Hy – DM type 2, Obesity, HTN
Relevant Hy- 2 years complains of limited ROM 1\textsuperscript{th} finger Rt hand
Dx - Trigger finger
Tx - NSAID and steroids injection – partial improvement
Sequence of events

10/01/2011- Open release of A1 pulley

POD 7- Normal ex, removal of stitches, full ROM

POD 27- Wound still open, serotic discharge, no signs of wound infection, treated locally with iodine dressing

POD 30- No improvement

Dx-Tenosynovial fistula

POD 33- Second operation.
- **POD 36**- serotic discharge, sign of median nerve compression
- **Tx**- wrist brace & NSAID
- **POD 45**- Serotic discharge, signs of median nerve compression, removal of stitches, thumb tenderness, limited ROM
POD 57-Third operation
- POD 82- Wound is closed, full ROM, thumb tenderness, signs of median nerve compression, treated with thumb splint
- 23/11/2011- normal ex
Today

- No discharge
- Full ROM
- No pain
- No signs of median nerve compression
- Full strength
- Minimal scar
Discussion
<table>
<thead>
<tr>
<th>Minor complications</th>
<th>Major complications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scar pain</td>
<td>Bow string of the flexor tendon</td>
</tr>
<tr>
<td>Extension lag</td>
<td>Transaction of digital nerve</td>
</tr>
<tr>
<td>Recurrence</td>
<td>Infection</td>
</tr>
<tr>
<td></td>
<td>Synovial fistula</td>
</tr>
</tbody>
</table>
What is a synovial fistula?
Review of current publications
Flexor tenosynovial fistulas in the palm.
Naam NH.

- 15 patients who were surgically treated for tenosynovial fistulas in the palm.
- 6 had multiple surgeries for release of stenosing flexor tenosynovitis with intraoperative steroid injections
- 4 patients had had unsuccessful closure of the fistula
- There were no signs of infection
- Conservative treatment in all patients for an average of 7 weeks
Complications of open trigger finger release.
Will R, Lubahn J.

- 43 patients who had had 78 open trigger finger releases by a single surgeon.
- Two major complications were noted: a synovial fistula that required excision, and PIP stiffness. The major complication rate was 3% (2/78).
conclusions

- Informing the patient
- Extensive dissection in addition to the use of steroids increase the likelihood of developing fistula
- No signs of infection
- Sign of median nerve compression
- Surgical excision is the recommended treatment
תודה רבה