Lesions of the PIP palmar plate and residual flessum. Immobilise to favorise movement.... A series of 52 patients

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55e congrès SFCM
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A simple sprain can evolve in a degenerative

Retraction of the palmar plate during the healing process: PIP flessum
Degenerative process

Lateral extensor band migrate palmarly (triangular lamina distention)

Retraction of the palmar plate during the healing process: PIP flexsum
Transverse retinacular retraction fixes palmar migration.

Lateral extensor band migrate palmarly (triangular lamina distention).

Retraction of the palmar plate during the healing process: PIP flessum.

Degenerative process
Degenerative process

Retraction of the palmar plate during the healing process: **PIP flessum**

Lateral extensor band migrate palmarly (triangular lamina distention)

Transverse retinacular retraction fixes palmar migration

Oblique retinacular retraction, fixes deformity (fPIP flessum, DIP hyperext.)

« false buttonhole deformity »
Available management strategies

C. Le Lardic - OSE

D. Thomas

MOBILISATION

JC. Rouzaud
IMMOBILISE

to avoid flessum

Retrospective study of a series of 52 patients
A study of a series of 52 patients

- Mean age: 40.2 years
- 47% female, 53% male
- PP avulsion visible on radiograph: 26%
- Mean management delay: **98 days**
Phase 1
Serial Casting Method

Successive thermo-formed tailored tube splints
Efficient against flessum > 20°
Phase 1
Serial Casting Method

- Static: analgesic effect - EVA 4 to 1
Phase 1
Serial Casting Method

- Static: analgesic effect - EVA 4 to 1
- Tubular- compressive: trophic effect perimeter– 66 à 61mm
Phase 1
Serial Casting Method

- Statique: antalgique - EVA de 4 à 1
- Tubular- compressive: trophic effect perimeter– 66 à 61mm
- DIP free for movement...flexion +++
  - Retenses oblique retinaculum
  - Dorsalises the lateral bands
  - Retenses transverse retinaculum
Phase 1
Serial Casting Method

A mean of 2,7 tubes
Flessum resolution
25,9° to 2,2°
Phase 2
Strict immobilisation in complete extension for 3 weeks

Spontaneous retrieval of pre treatment flexion ROM within 4 to 5 days
Phase 3
Stabilise outcome: orthosis

Day

Short and Regular periods
Punctuated by triple flexion exercises (DIP and PIP)

Night
Phase 3
Stabilise outcome: education therapy

Techniques:

• Deep lateral massage latéral, drainage if needed
• Decoaptations
• Work on DIP flexion (PIP extended)

• Work on active PIP extension:
  ➢ Extrinsic muscles
  ➢ Intrinsic « l’extension active ou verrouillage de l’ipp » DIU 2008 Julia Cremilleux

Intrinsic contraction
Study of a series of 52 patients

<table>
<thead>
<tr>
<th></th>
<th>Initial assessment</th>
<th>Last tube</th>
<th>Final outcome (&gt; 1 year)</th>
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</thead>
<tbody>
<tr>
<td>Flessum</td>
<td>25,9°</td>
<td>2,2°</td>
<td>6,8°</td>
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<tr>
<td>Flexion PIP</td>
<td>82°</td>
<td>47°</td>
<td>97°</td>
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<tr>
<td>Flexion DIP</td>
<td>50°</td>
<td>35°</td>
<td>66°</td>
</tr>
<tr>
<td>EVA</td>
<td>4</td>
<td>1</td>
<td>0,4</td>
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<tr>
<td>Perimeter PIP</td>
<td>66mm</td>
<td>62mm</td>
<td>60mm</td>
</tr>
</tbody>
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maximum extension obtained 2,7 statics tubes
Perfect adequation with physiopathology

Quality of mid-term outcome depends on patient cooperation

IMMOBILISATION in order to
- optimise the outcome
- gain time