MONDOR'S DISEASE: AN UNDERLYING CAUSE OF PEYRONIES DISEASE?

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We have no disclosures
• Penile Mondor’s disease (PMD) is thrombophlebitis or phlebitis of “subcutaneous” vessels

• First Described by Mondor in 1939 in the breast

• Described in the penis by Helm and Hodge 1958. It is a “rare and self limiting disease”
A 36-year-old woman (left) presented with a slightly tender cord on the upper inner arm 2 weeks after transaxillary breast augmentation. The cord produced a bowstringing effect at the abduction of the arm. The inflammation spontaneously resolved 6 weeks later, and the patient was asymptomatic 7 months after surgery.

Mondor's Disease: An Underlying Cause of Peyronies Disease?

**Figure 1.** Case 1: 26-year-old patient with worm-like firm lesion of 5 days duration.

**Figure 2.** Case 1: biopsy demonstrating a dilated vessel with thickened fibrous wall and intraluminal eosinophilic condensed material (H & E, × 13).

**Figure 1:** Penile ultrasound with the arrow directed towards thrombus in the dorsal vein. It is noncompressible.

**Figure 2:** Penile ultrasound with the arrow directed towards Doppler noting absence of flow in dorsal vein.
Mondor's Disease of the Penis

• Presentation:
  • The patients usually present with an hardness" like a rope" at dorsum of the penis.
  • Episodic or continuous pain and throbbing.
  • Erythema and edema may be seen on the penile skin.
  • Pain typically exacerbated during erection.

• Clinical Course:
  • Pain subsides
  • Mass goes away
  • You never see the patient again

• Treatment:
  • Conservative therapy with observation or NSAID anticoagulation agent
  • “Temporary” sexual abstinence can occur healing with “total recovery”

• Reality Check: There are no long term studies on the clinical course of Mondor’s disease
Clinical Presentation of Mondor's

- Pain mass on dorsum of the penis
- Hard Dorsal Cord

Table 1 Causes of penile Mondor’s disease

<table>
<thead>
<tr>
<th>Traumatic etiology</th>
<th>Infectious etiology</th>
<th>Surgical etiology</th>
<th>Oncologic etiology</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Causes of the disease include frequent, severe, and prolonged sexual intercourse</td>
<td>Syphilis</td>
<td>Repair of inguinal hernia</td>
<td>Cancer in the pelvic region</td>
<td>Use of intracavernous drugs</td>
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<td>Penile trauma</td>
<td>Candida infections</td>
<td>Orchiopexy</td>
<td>Metastatic pancreas cancer and migratory phlebitides due to paraneoplastic syndromes</td>
<td>Abuse of intravenous drugs</td>
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<tr>
<td>Prolonged sexual abstinence</td>
<td>Distant infections</td>
<td>Varicosectomy</td>
<td>Tendency to thrombosis</td>
<td>Thrombophilia</td>
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<tr>
<td>Use of vacuum</td>
<td>History of sexually transmitted diseases</td>
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<tr>
<td>Body building exercises</td>
<td>Behçet’s disease</td>
<td></td>
<td>Venous occlusion caused by filled bladder</td>
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What is Peyronies Disease?

• “An acquired connective tissue disease of the tunica albuginea of the corpus cavernosum, characterized by excessive fibrosis and plaque formation… causing penile deformities in the erect state including curvature, shortening, indentation and narrowing with a hinge effect”

• “The exact etiology is unknown”

• Men between 16 and 60

• “It is more common in younger Caucasian men and after radical pelvic surgery, namely radical prostatectomy”
What is Peyronies Disease?

• The natural history of PD varies;
  • Penile curvature
    • worsens in 30%-50%  
    • stabilizes in 47%-67%, while
    • spontaneous improvement in 3%-13% of patient
  • Can progress quickly (weeks) or slowly (years)
  • Most of the curvatures are dorsal or dorso-lateral
  • It seem to occur in the distribution of venous drainage of the penis
  • It can be associated with or without a plaque
  • The plaques can be multiple
  • We have no idea what causes it but there is clearly an inflammatory process
Peyronie’s or Mondor’s?

- Virtually every paper on Mondor’s mentions PD in the differential dx but no connection has been made.
- Superficial venous thrombophlebitis can propagate to deep venous thrombosis (rarely does)
- The superficial venous system and deep penile venous system are connected
- The rigidity of the penis is predicated on hydraulic forces. Evolutionarily the os penis was lost when we became monomagous and prolonged intromission (multiple partners) during a limited “breeding season” was not necessary for survival of the species.*
- The “design and purpose” of the penis is purely procreational. Evolutionarily after our procreative years (15-20 years of age) it serves little purpose other than to facilitate urination.
- The venous system of the penis is subject to repetitive traumatic forces throughout life during prolonged intercourse. What other superficial venous system in the body is subject to such “trauma”?* Proc. R. Soc. 8 283 2016
Peyronie’s or Mondor’s?

• History:
  • 58 y.o.-year-old pathologist who is currently married for 25 years
  • Sexually active 1 per week.
  • Pain at the coronal area of the penis with erection starting 2 months ago
  • The pain is only present with erection. No pain in the flaccid state.
  • Erectile function has been good.
  • No deviation to his penis

• PMHx
  • Hx of Stones in 2008 requiring ureteroscopy
  • Hx hypogonadism
  • Hx BPH

• Meds
  • Pepsid, T Cip

• Physical Exam
  • He has been circumcised phallus, no penile lesions.
  • He has fibrous cordlike enduration of the dorsum of his penis. It starts at the coronal sulcus and extends for 3 cm proximally and is 1.5 cm wide.
Peyronie’s or Mondor’s?

• Is it possible that given genetic and predisposing risk factors (age, diabetes, hypogonadism) a SVT might progress to a thrombosis of the deeper venous system or any of the other connected venous branches, resulting in perivascular inflammation and fixation of the Tunica Albuginea?

• Is venous thrombosis/thrombophlebitis an underlying cause of Peyronies disease?

• Is Mondor’s disease part of the continuum of penile inflammatory venous vascular disease that can end up as a penile mass with or without penile curvature otherwise known as Peyronies disease?
Should we be treating early Peyronies disease aggressively as a “superficial” venous thrombosis/thrombophlebitis and not be waiting till the damage is done??