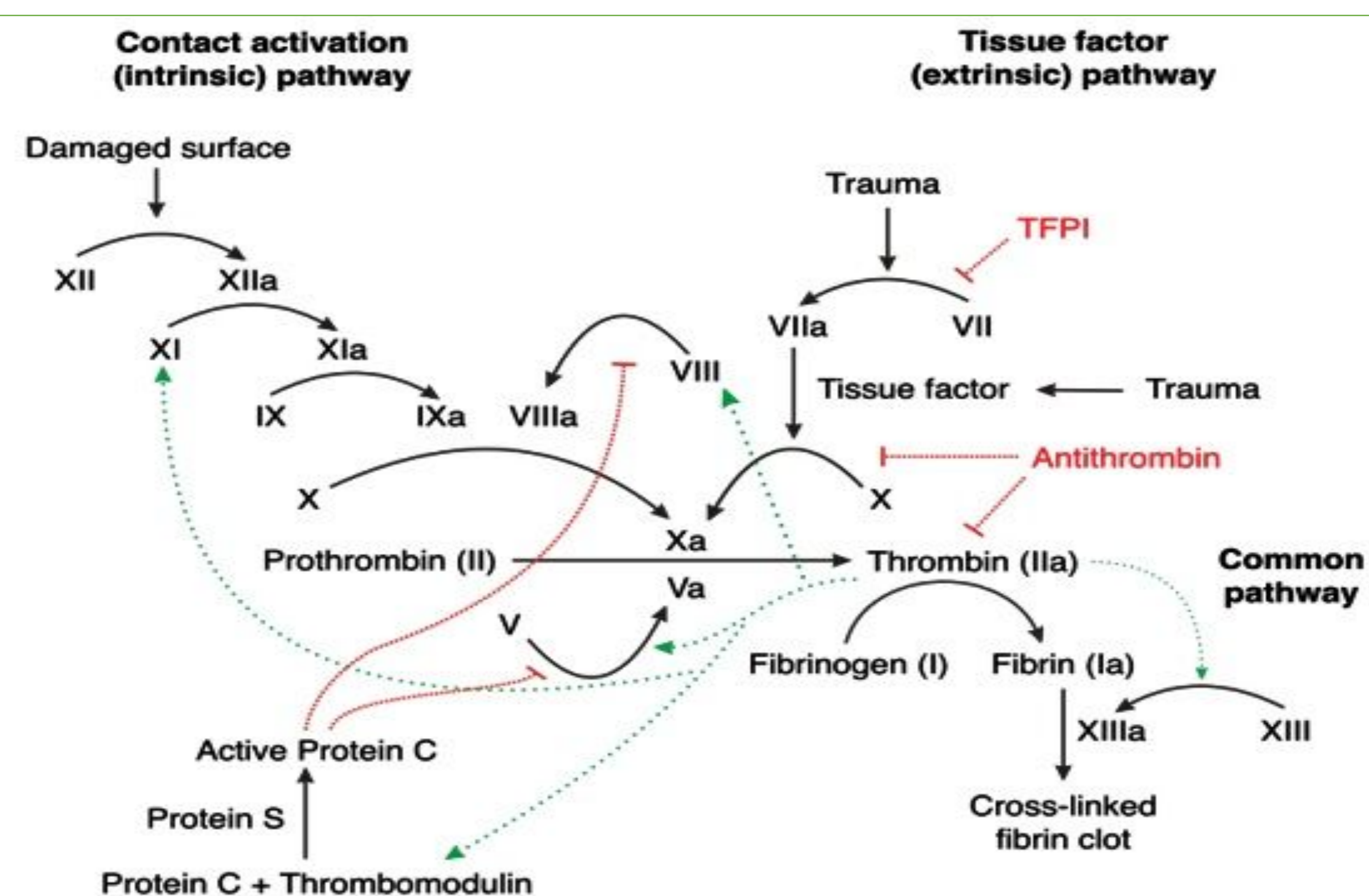


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Background

- Hemophilia C (Factor XI deficiency)
- Most common symptoms: prolonged bleeding after surgery or trauma
- Diagnosis: decreased factor XI levels, prolonged activated partial thromboplastin time (aPTT)
- Perioperative considerations
 - History of prior bleeding episodes after surgery or trauma
 - Labs: Factor XI activity assay, PT/INR, aPTT, CBC
 - Consider administration of tranexamic acid or fresh frozen plasma
 - Rare serious cases may warrant recombinant factor XI

Coagulation Cascade



Case Presentation

- 35 year old male
- PMH: Type 2 diabetes mellitus, failed back surgical syndrome, hemophilia C
- PSH:
 - Right L5-S1 microdiscectomy (July 2021), course complicated by wound infection requiring operative washout and antibiotic therapy.
 - FFP given pre-op, minimal EBL
 - Right L5-S1 interbody fusion (February 2022)
- Pain Clinic
 - Low back pain with radiation down posterior aspect of bilateral lower extremities to the feet
 - NSAIDs, neuropathic agents, and muscle relaxants provided minimal relief
 - Underwent caudal ESI x2 with mild, short-lived relief
- SCS trial
 - Decreased factor XI activity - 49% (normal 65 - 130%)
 - aPTT 43.6 seconds
 - Patient was given 1 gram tranexamic acid
 - Minimal bleeding, < 5cc estimated blood loss
- SCS implant
 - APTT 42.4 seconds
 - PT 11.4
 - INR 1.0
 - Factor XI activity 53%
 - Patient received 1 unit fresh frozen plasma intraoperatively
 - EBL < 10cc intraoperatively
 - No bleeding or oozing from surgical sites postoperatively

Discussion

- Hemophilia C is overall milder in presentation compared to hemophilia A and B – not prone to spontaneous bleeding or hemarthroses
- Our patient had no prior episodes of post-operative or post-traumatic bleeding, therefore stratified as low risk
- Reported incidence of epidural hematoma after percutaneous SCS placement is 0.14-0.3% - relatively low however can have devastating neurologic sequelae
- Highlights the need for careful patient selection for SCS trials and implantations, many times necessitating multidisciplinary planning

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- 6) Image Source: <https://step2.medbullets.com/heme/120238/hemophilia>