



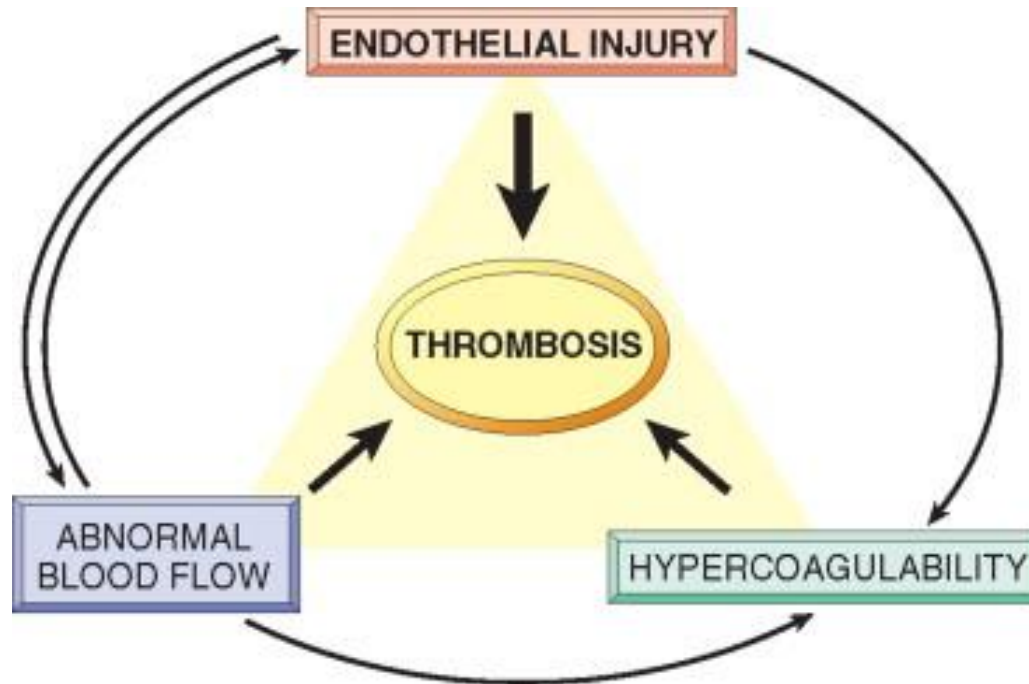
Distúrbios da Coagulação – Trombose e Embolia



Prof. Dr. Luiz Fernando Ferraz da Silva

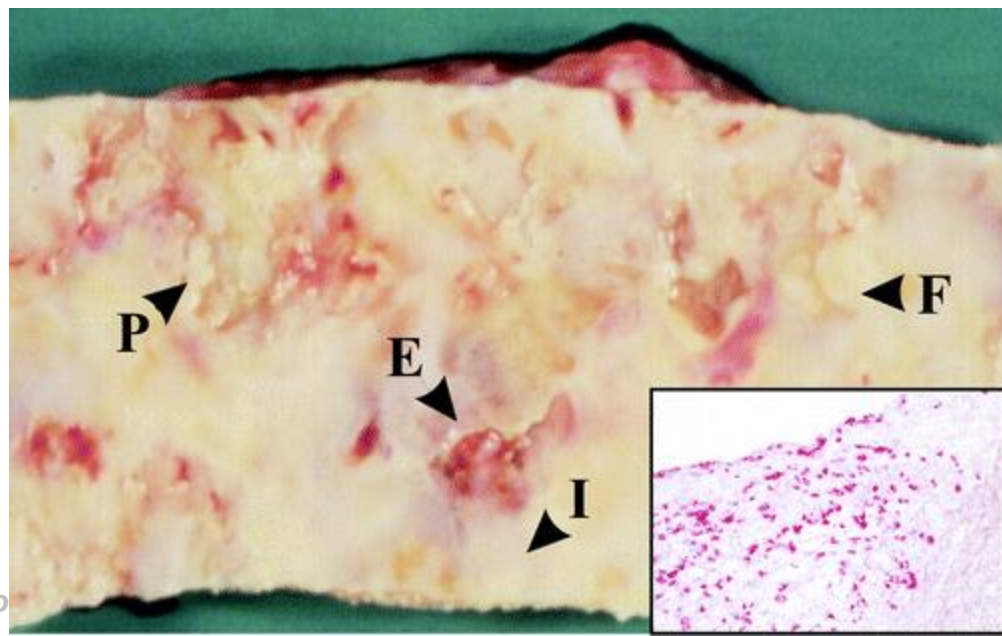
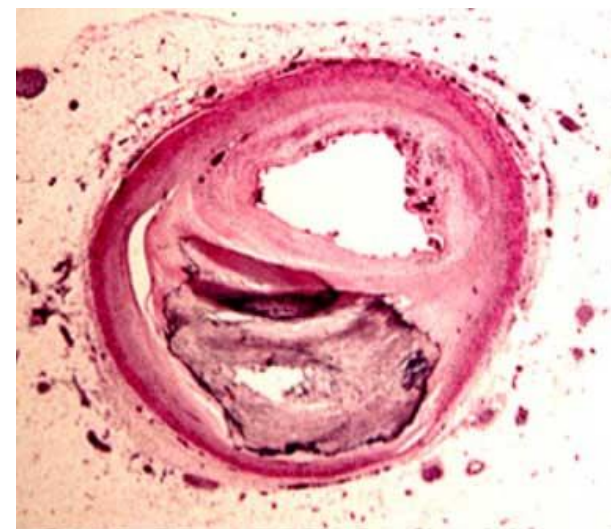
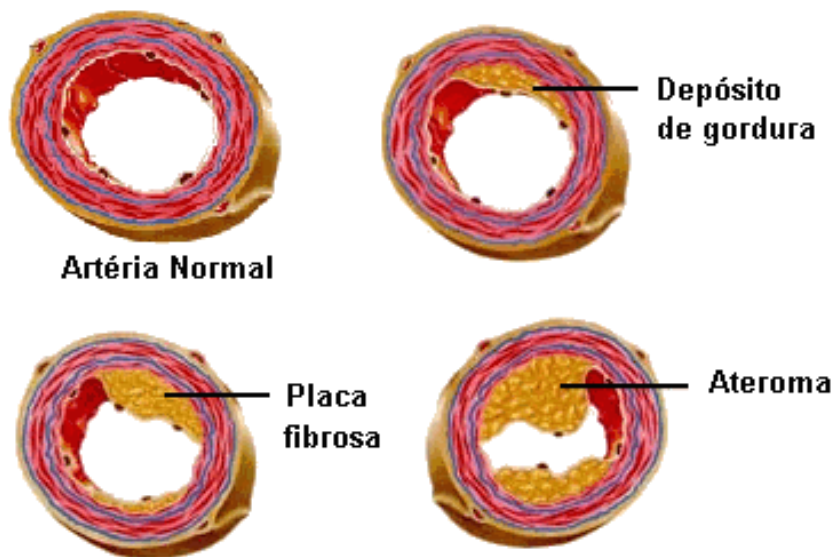
Faculdade de Medicina da Universidade de São Paulo – Departamento de Patologia
Faculdade de Odontologia de Bauru – Curso de Medicina

Tríade de Virchow

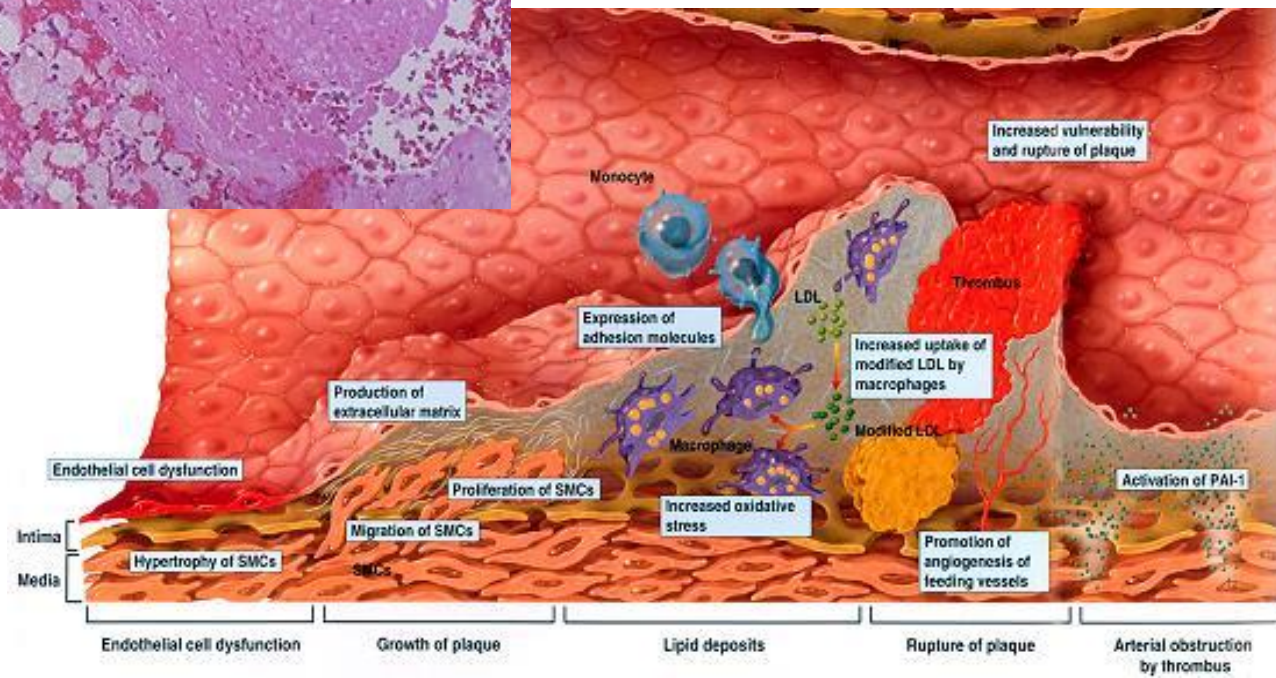
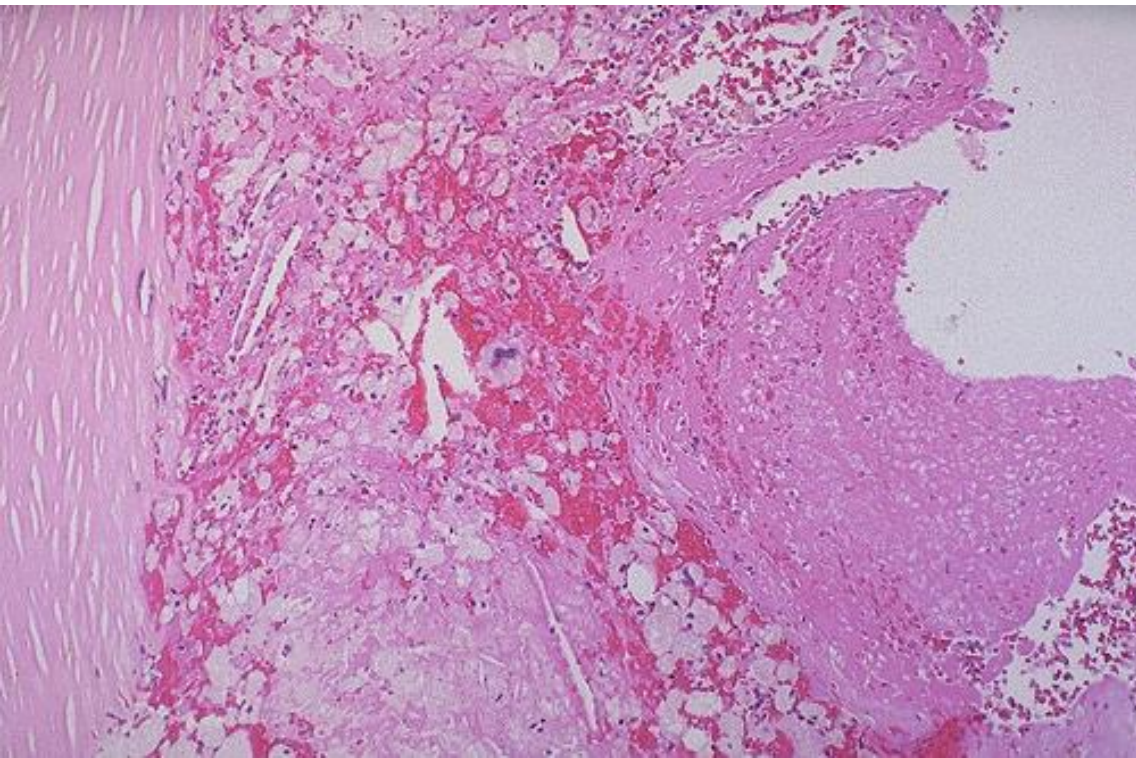


Dano Endotelial

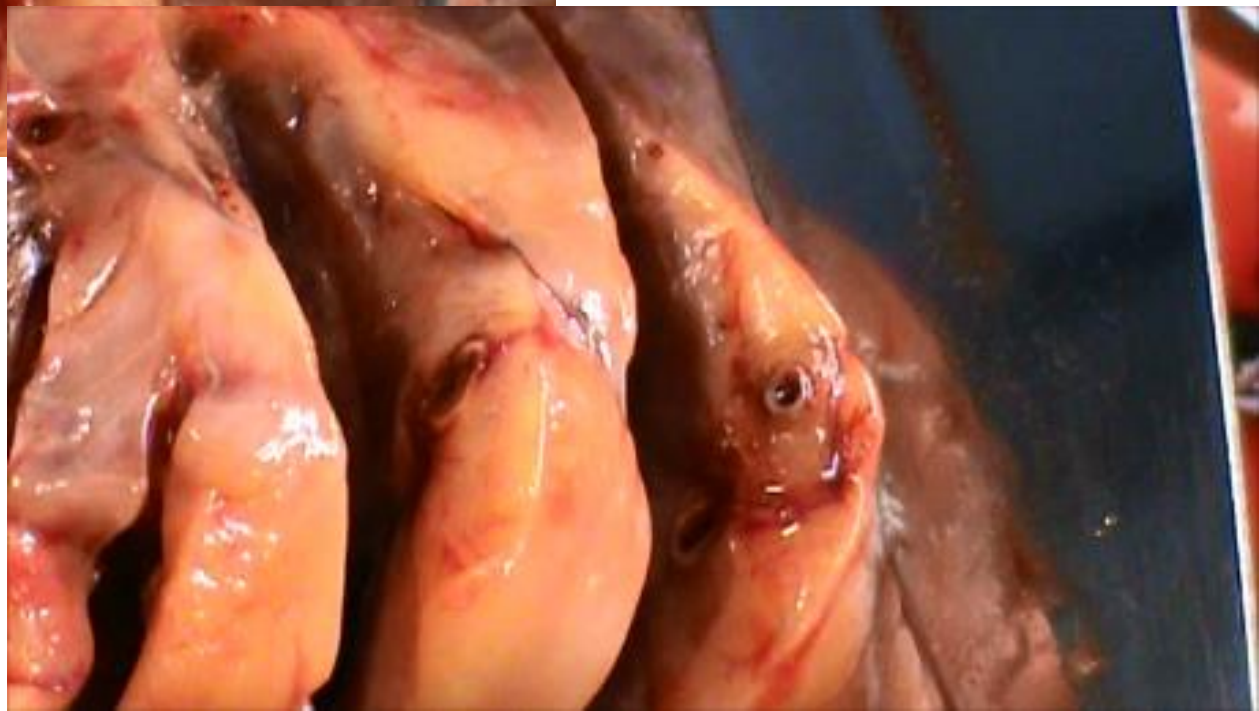
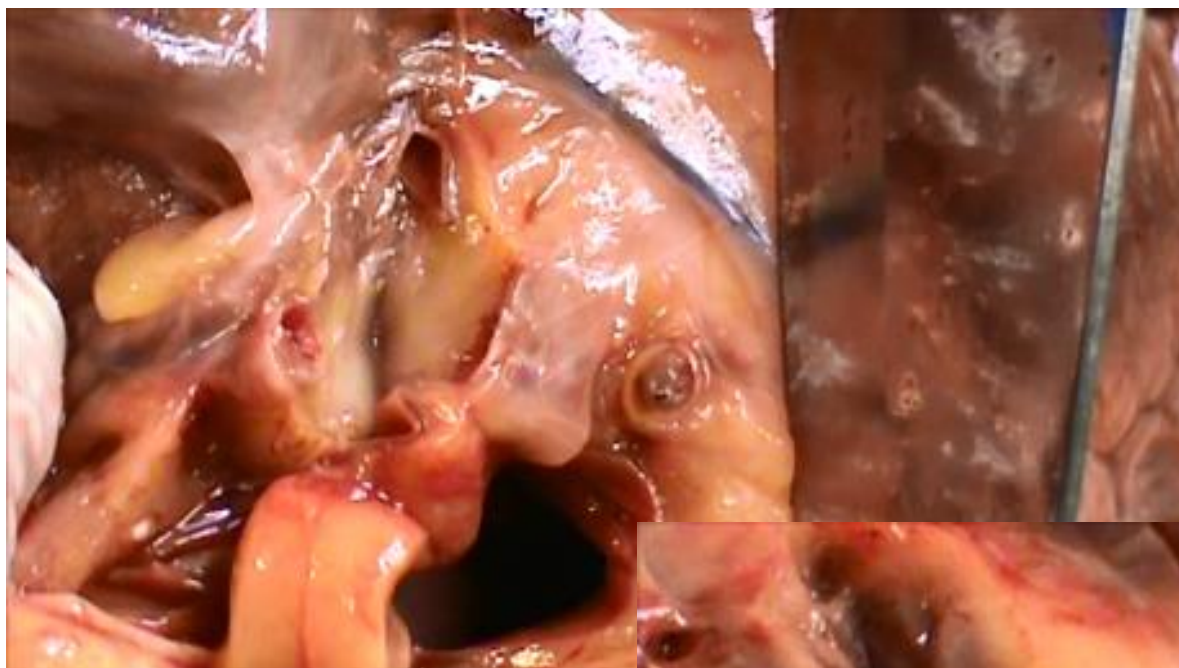
- Lesão endotelial direta
- Disfunção endotelial



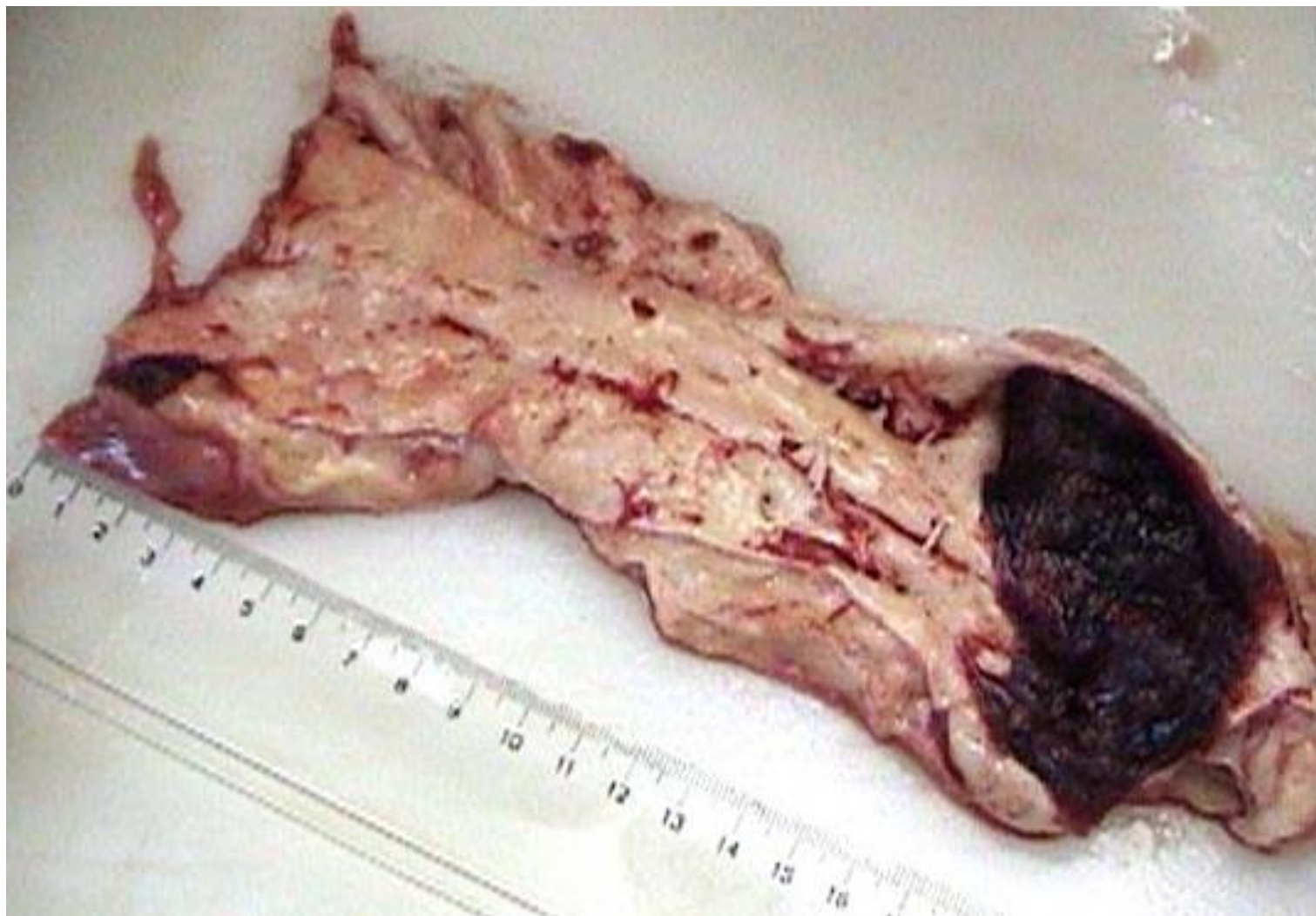
Dano Endotelial



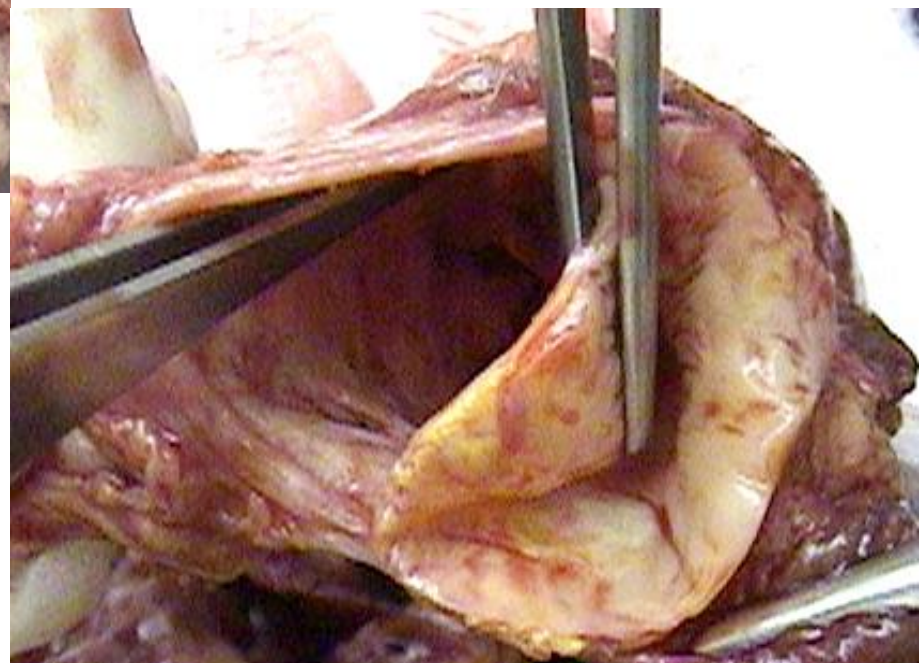
Dano Endotelial



Dano Endotelial

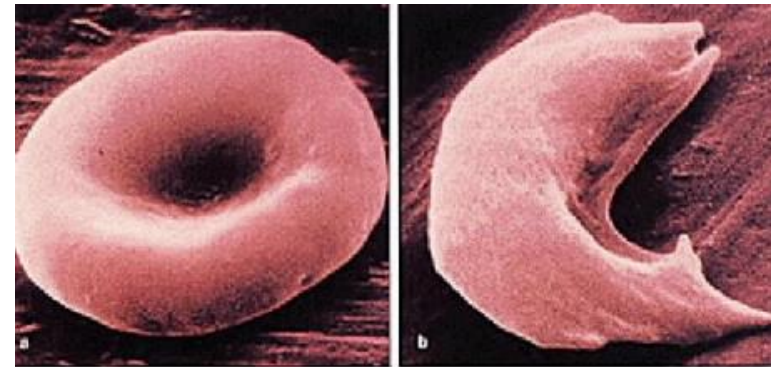
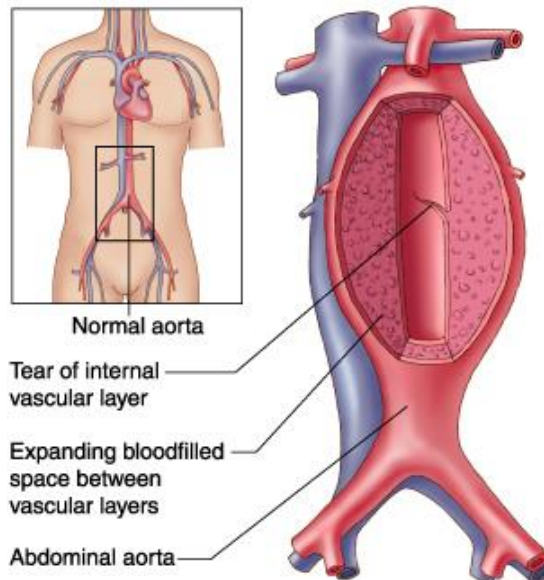
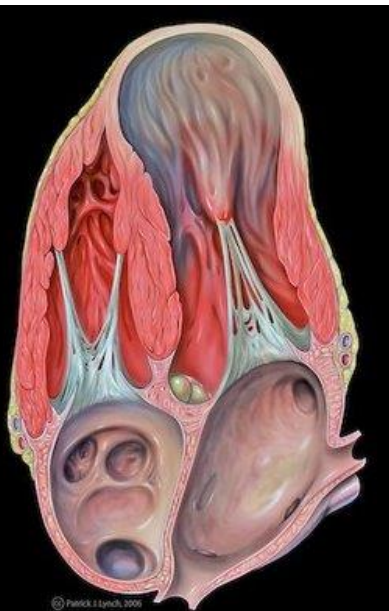
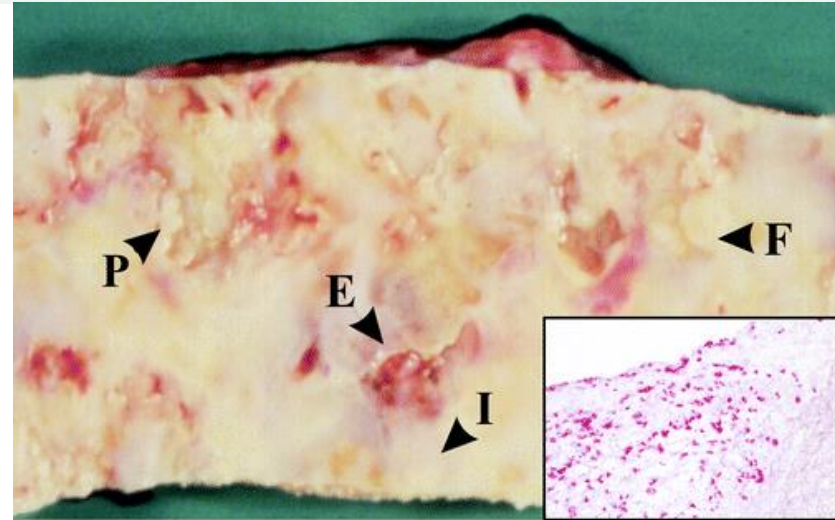


Dano Endotelial



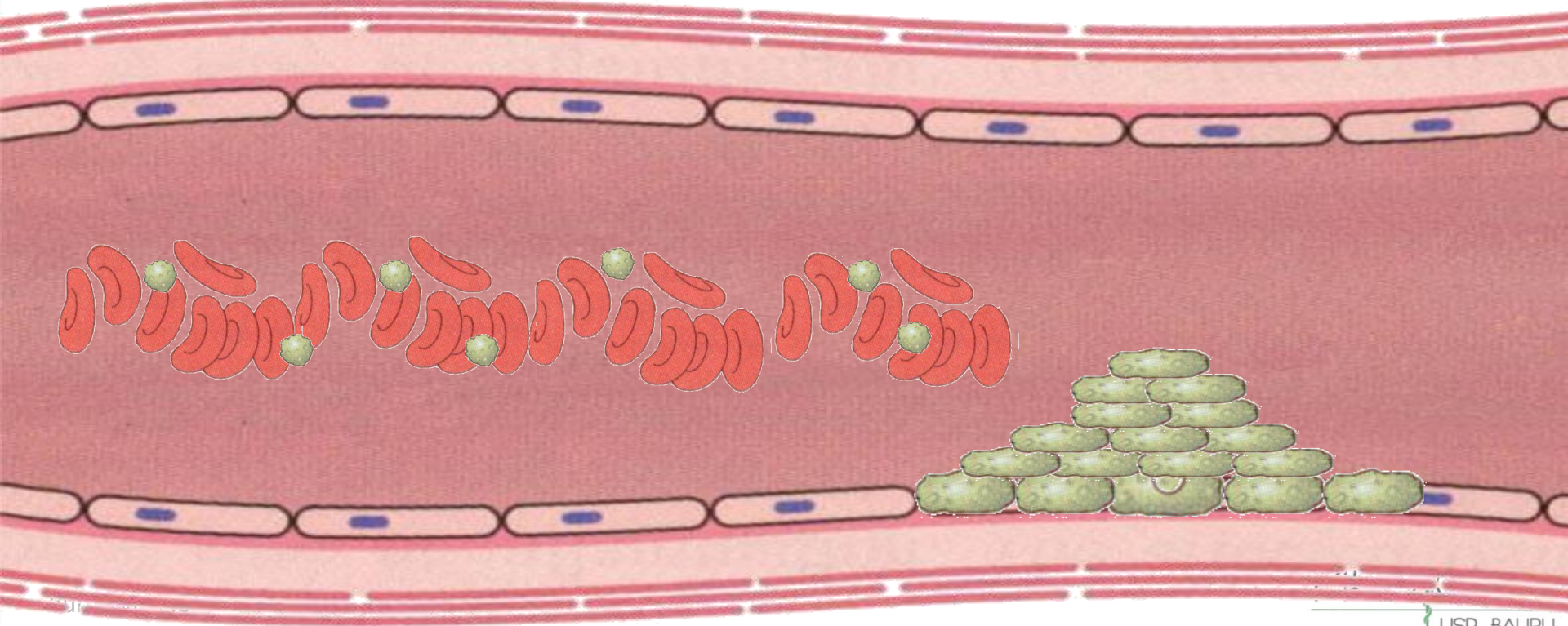
Alteração do Fluxo Sanguíneo

- Turbilhonamento
- Estase
 - Ativação endotelial
 - Quebra do fluxo laminar
 - Redução da eliminação de mediadores locais



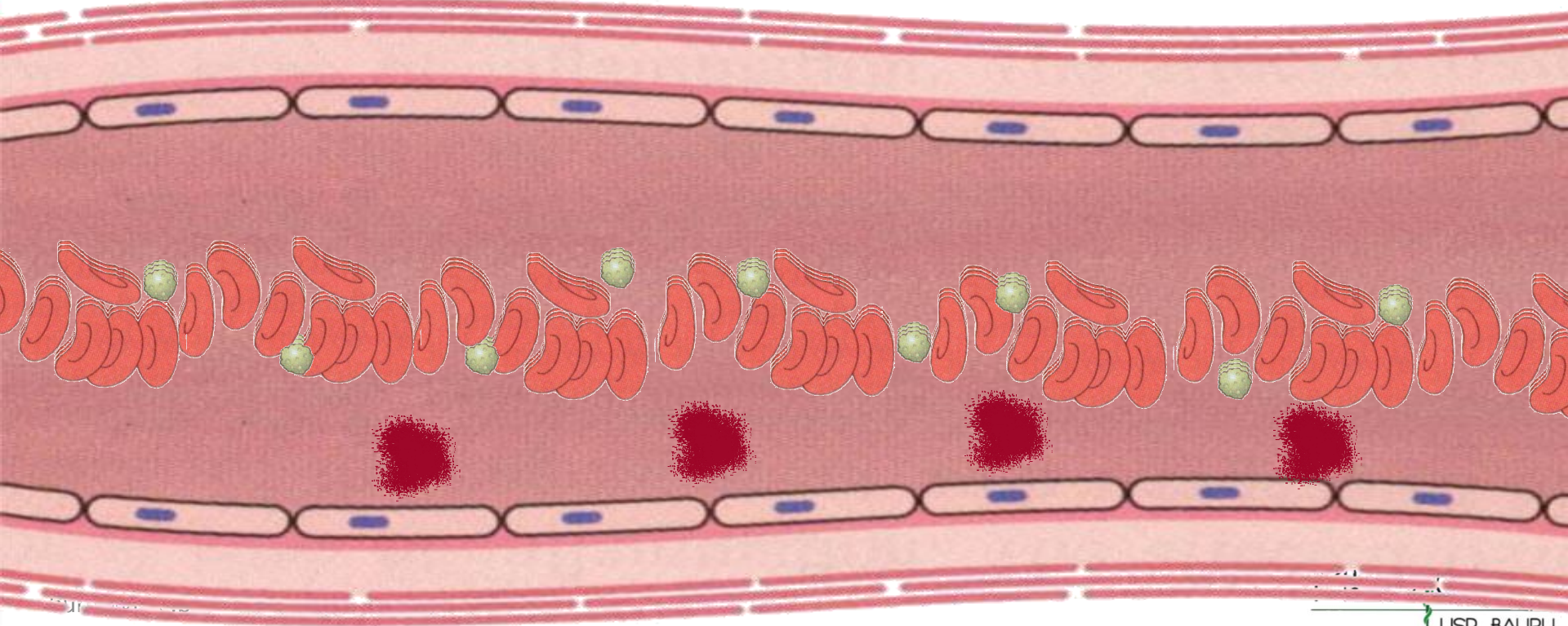
Alteração do Fluxo Sanguíneo

- Perda do fluxo laminar
- Concentração de fatores de agregação
- Dificuldade de acesso de anti-agregantes
- Ativação endotelial – trombose e adesão



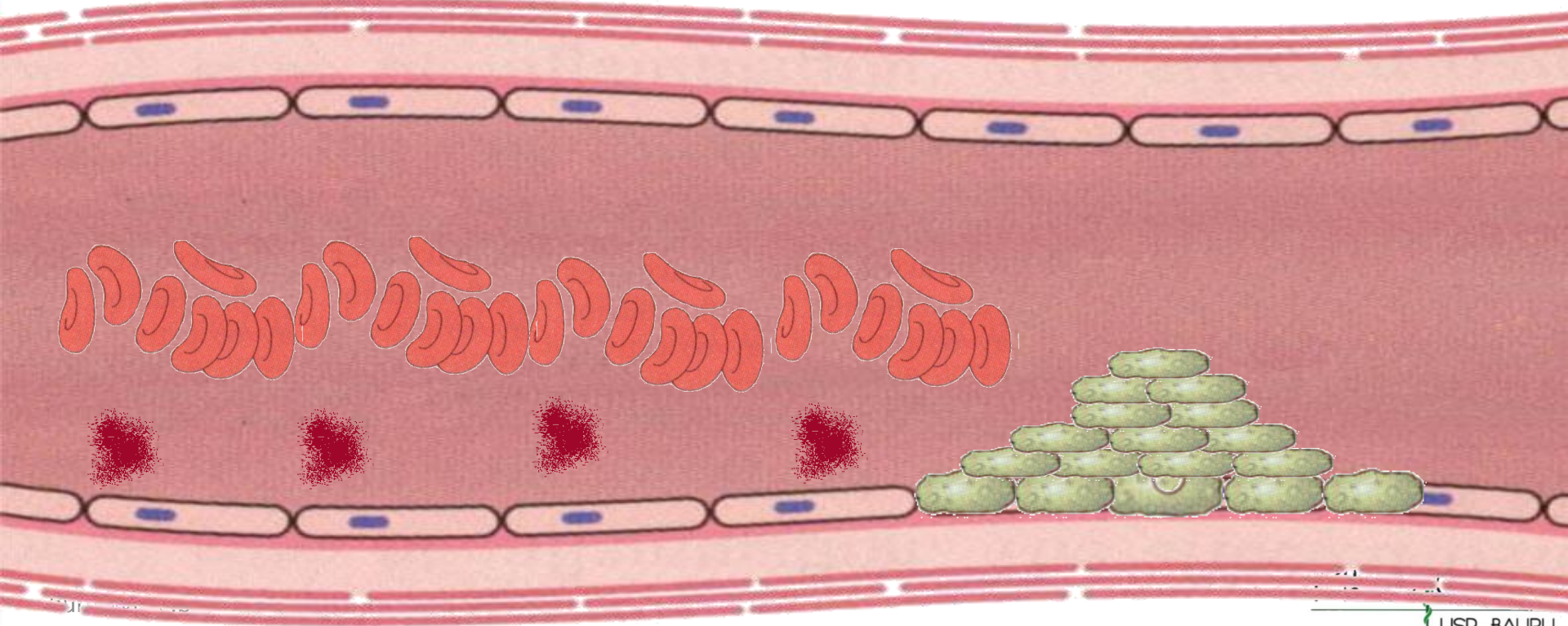
Alteração do Fluxo Sanguíneo

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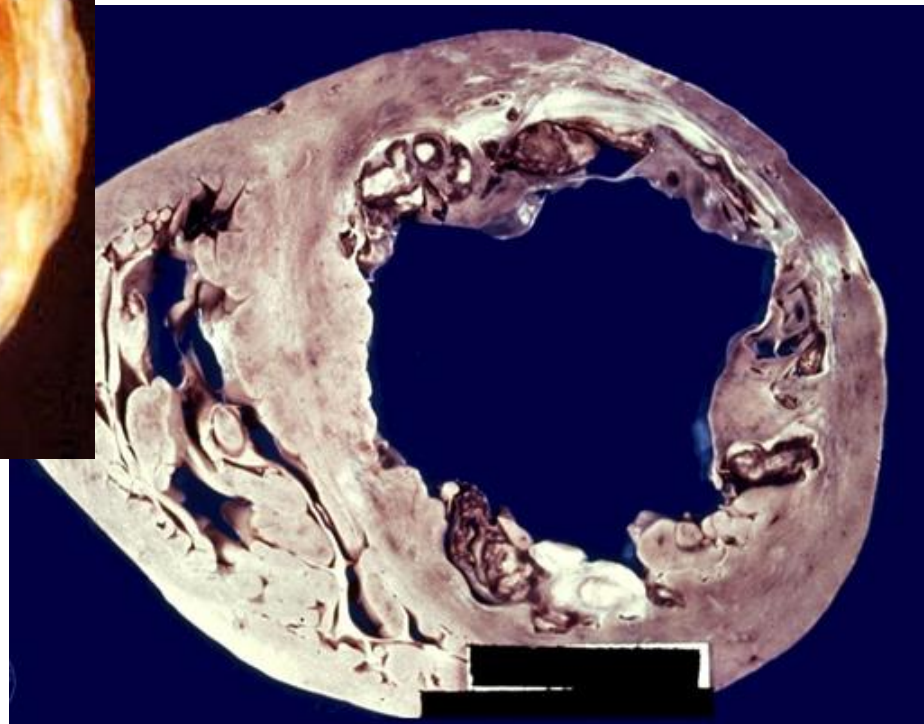
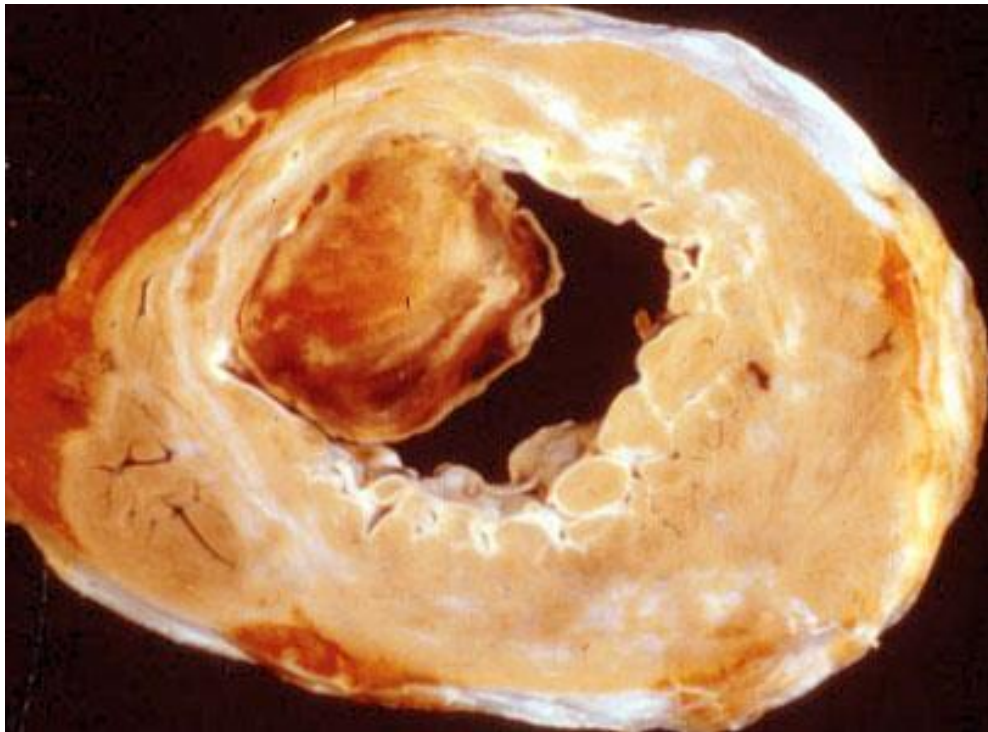


Alteração do Fluxo Sanguíneo

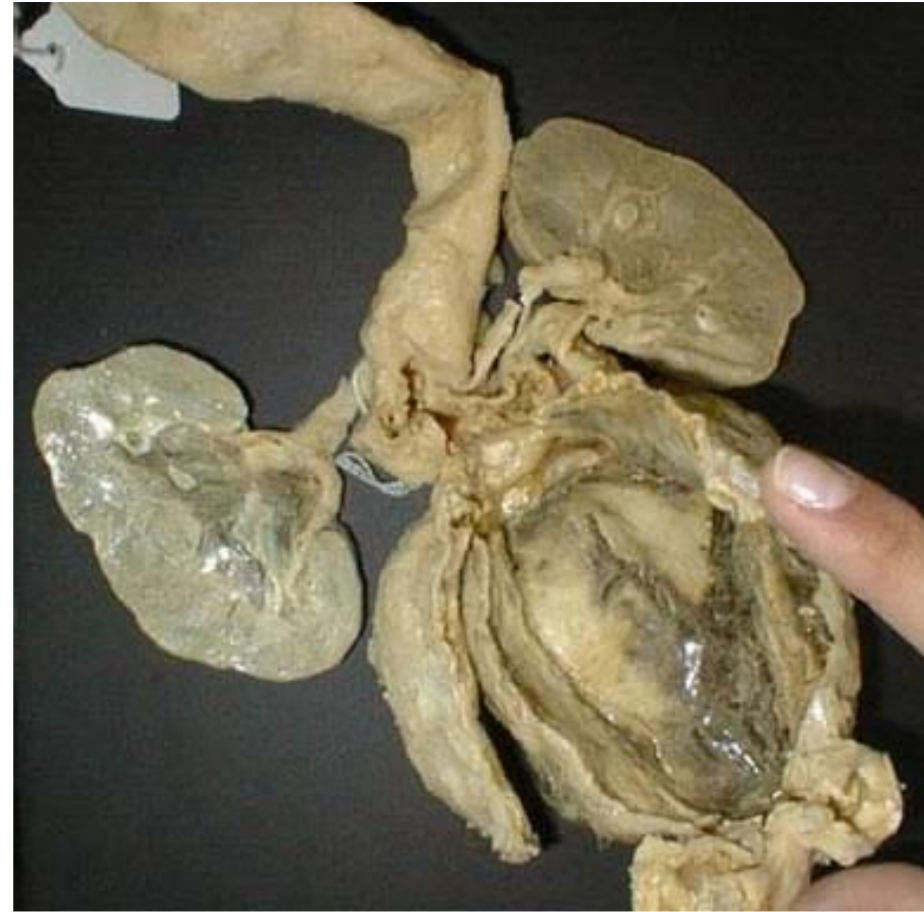
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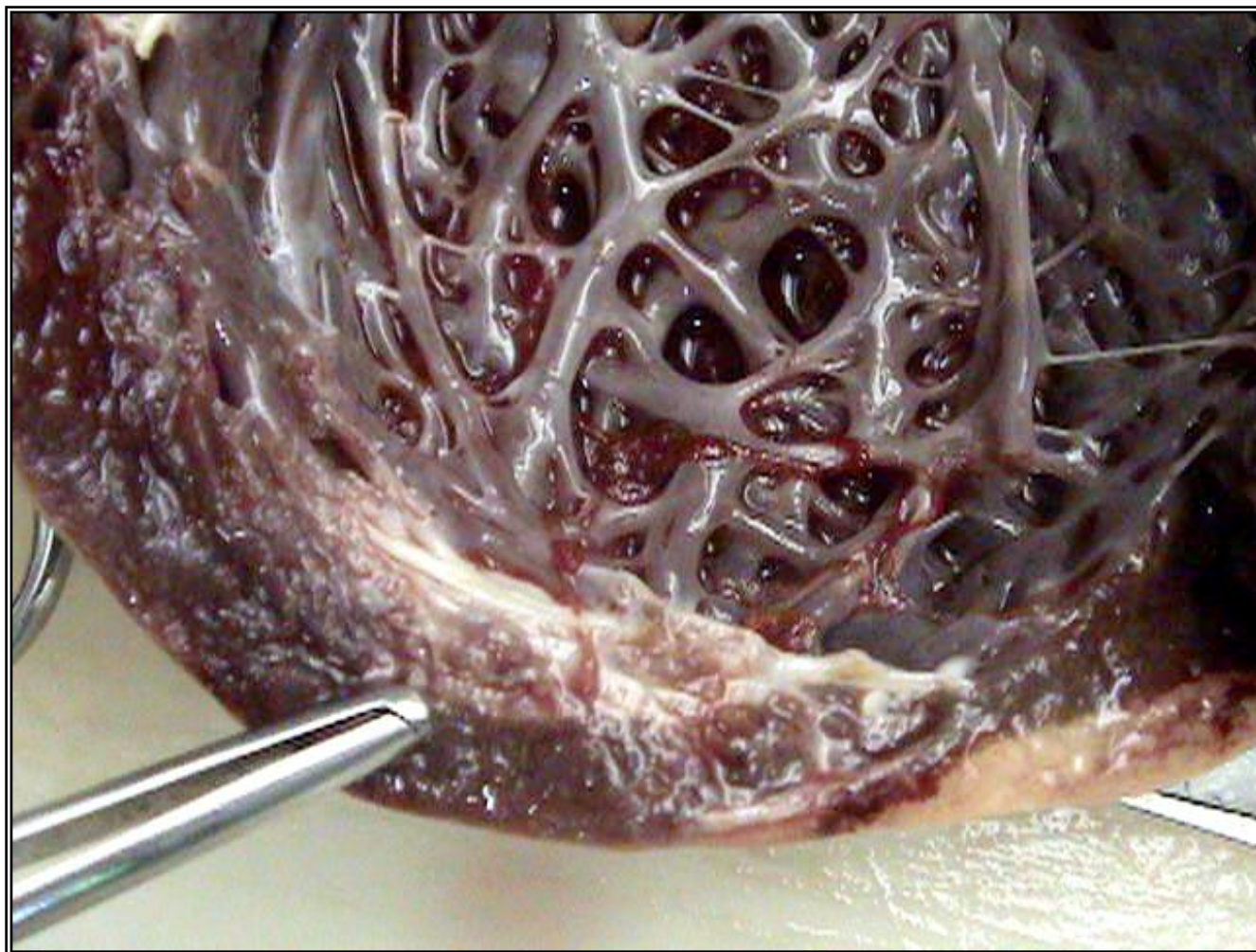
Alteração do Fluxo Sanguíneo



Alteração do Fluxo Sanguíneo

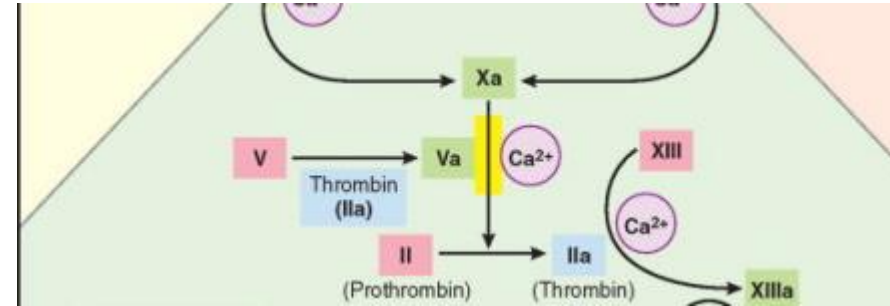


Alteração do Fluxo Sanguíneo



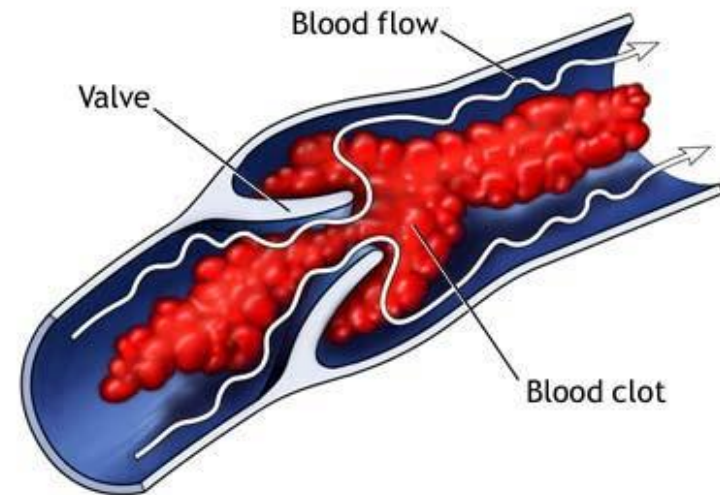
Hipercoagulabilidade

- Distúrbios primários
 - Mutaç o do Fator V (leiden)
 - 60% das TVPs recorrentes
 - Risco 50 vezes maior
 - Mutaç o da Pr -Trombina
 - Aumento dos n veis de protrombina
 - Atenç o nos pacientes jovens!
- Dist rbios secund rios (adquiridos)
 - Multifatoriais
 - Tabagismo, neoplasia, anticoncepcionais orais, gestaç o, obesidade
 - Trombocitopenia induzida por heparina
 - S ndrome Antifosfol pide
 - Cirurgias de grande porte
 - Doenç as auto-imunes



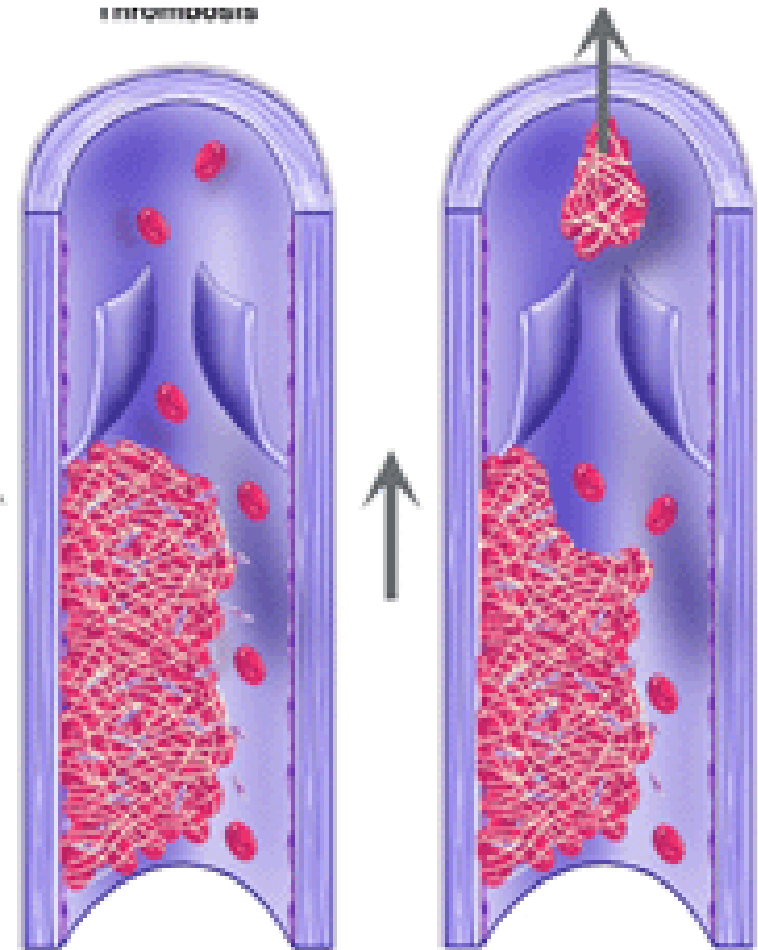
Características do Trombo

- Arteriais
 - Turbulência e dano endotelial
 - Progressão retrógrada
 - Coronárias, cerebrais e femorais
- Venosos
 - Estase
 - Progressão anterógrada
 - Redução da eliminação de mediadores locais
 - Mais avermelhados – por ter mais hemácias
 - Veias profundas, plexos venosos



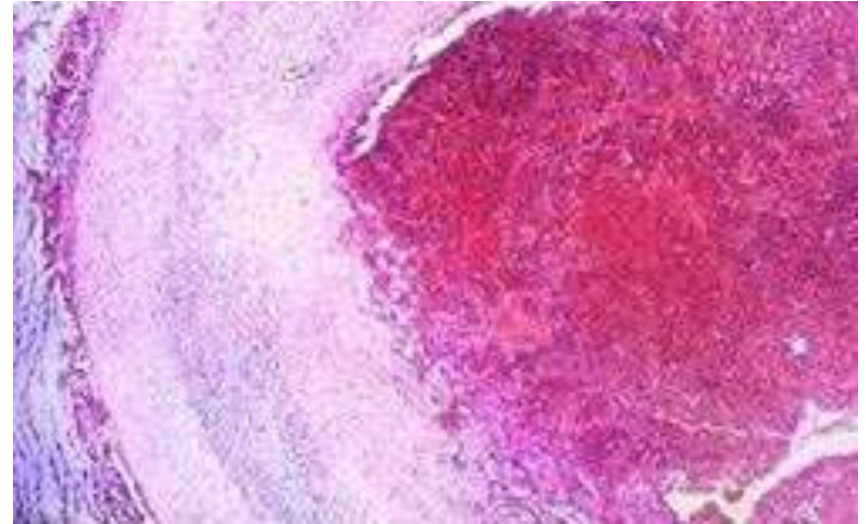
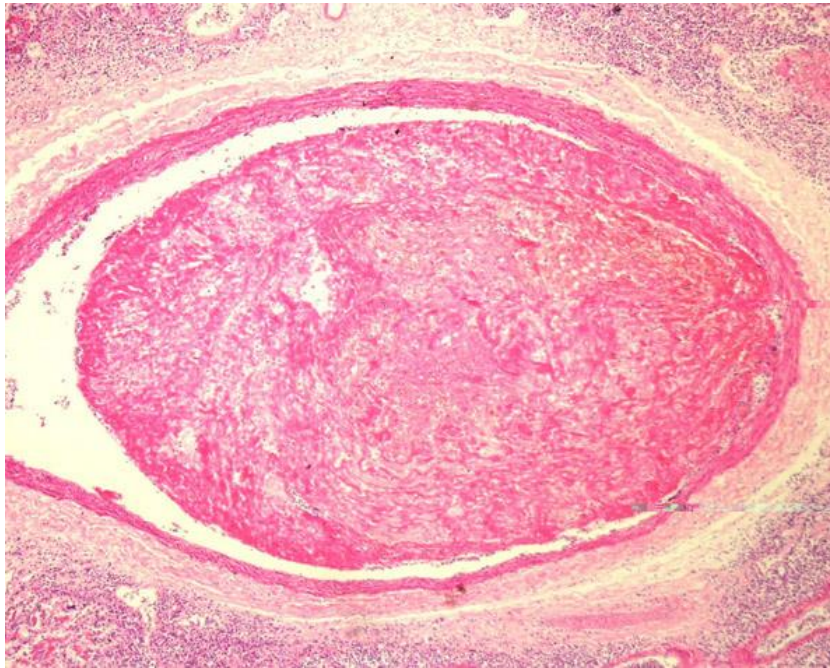
ADAM.

Características do Trombo

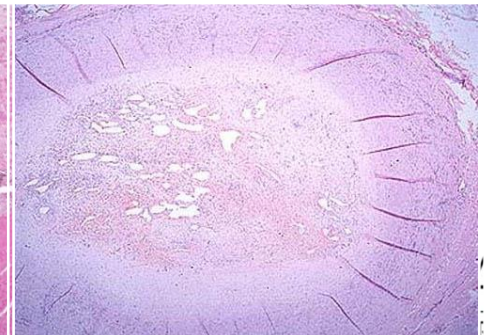
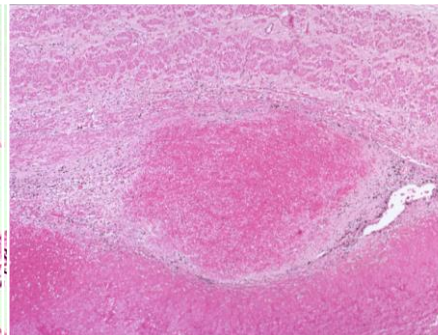
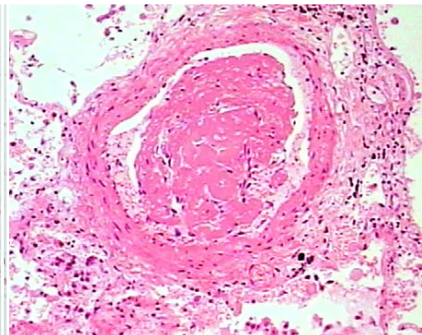
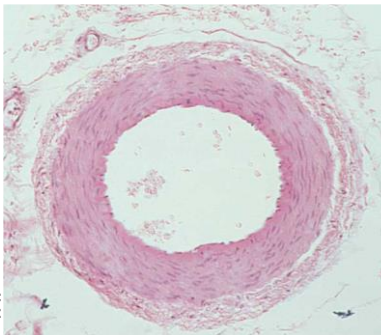
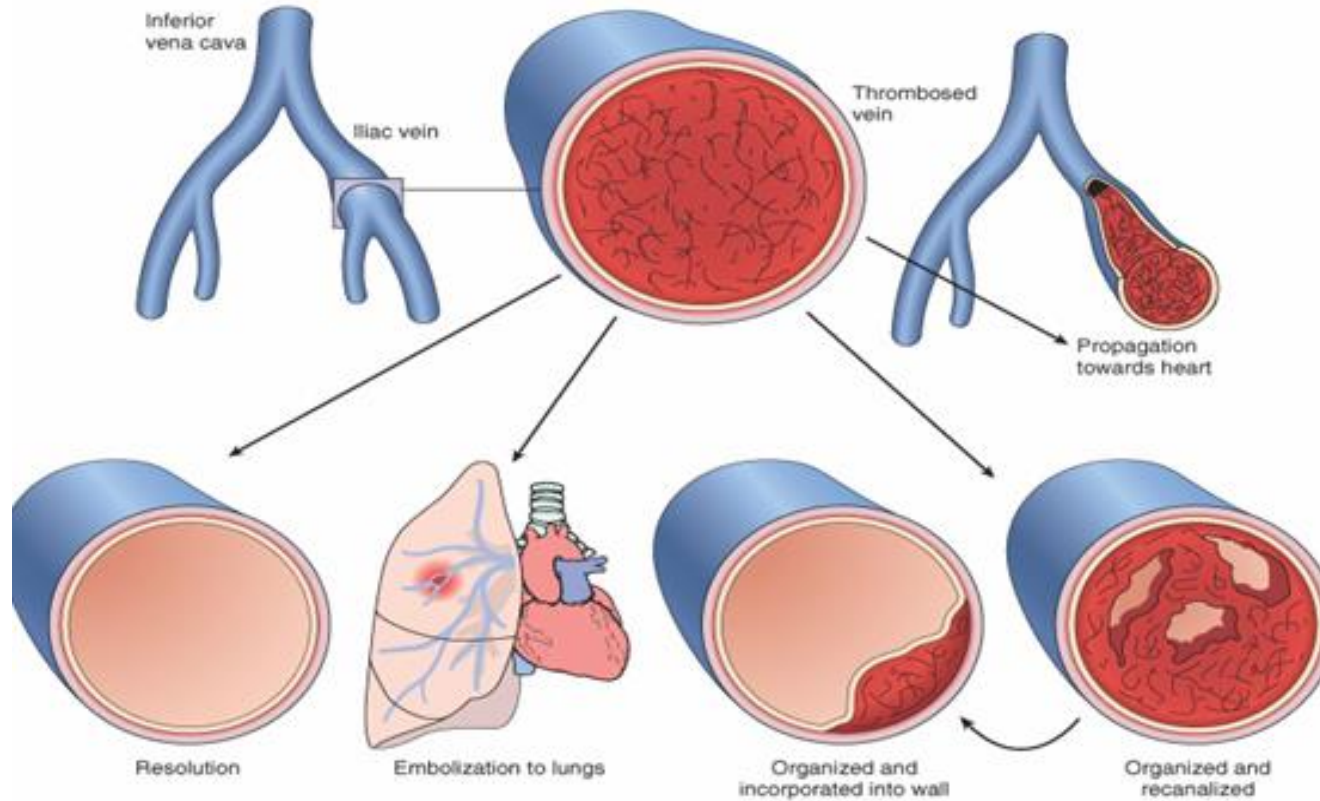


Características do Trombo

- Linhas de Zahn
- Trombo x Coagulo



Destino do Trombo



burns(

Embolias

Massa intravascular líquida, sólida ou gasosa transportada pelo sangue para um local distante de sua origem

Embolias

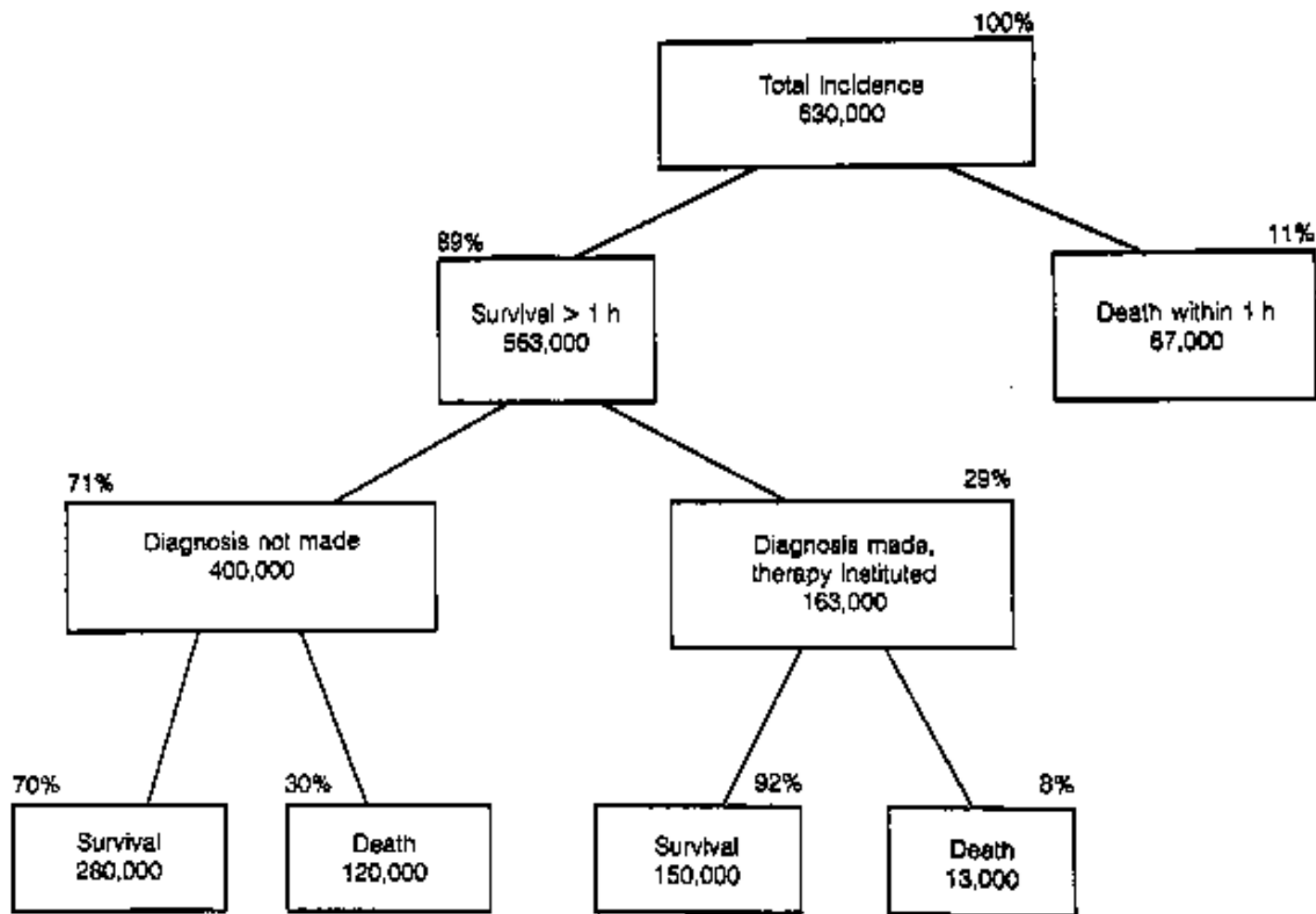
- Tromboembolismo pulmonar
- Tromboembolismo sistêmico
- Embolia gasosa
- Embolia gordurosa
- Embolia amniótica

Tromboembolismo Pulmonar

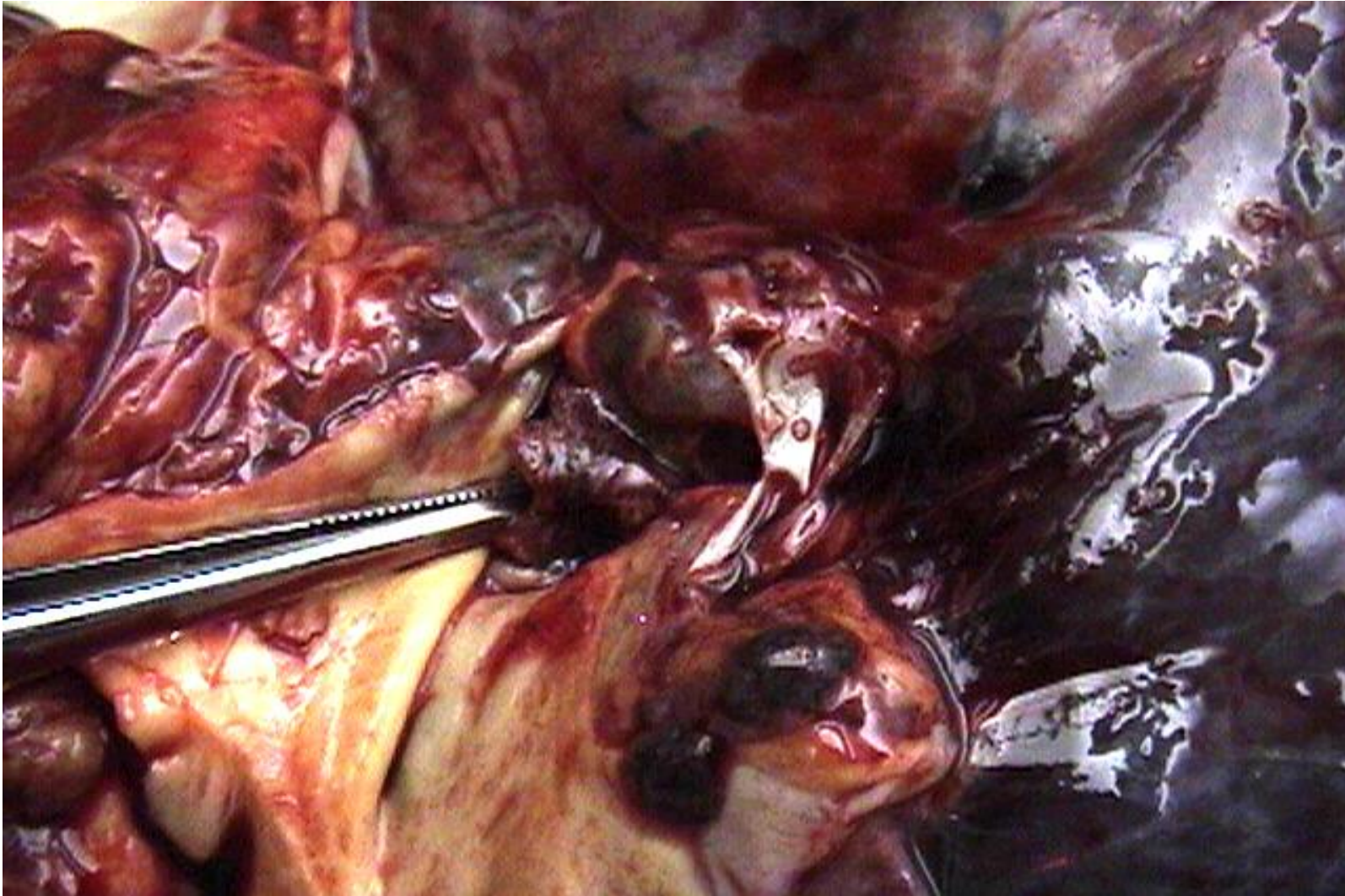
- Maior parte é silencioso – consequência depende do tamanho
- > 60% de obstrução – Cor pulmonale
- Impacto na causa de infarto pulmonar
- Consequências tardias



Tromboembolismo Pulmonar



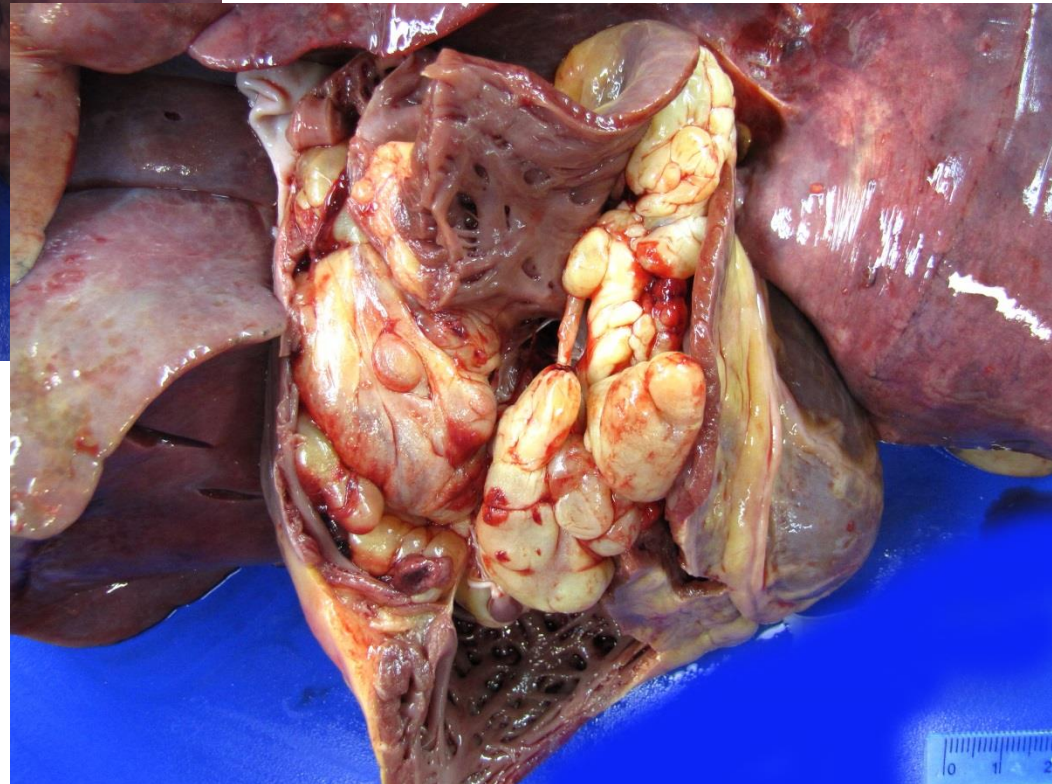
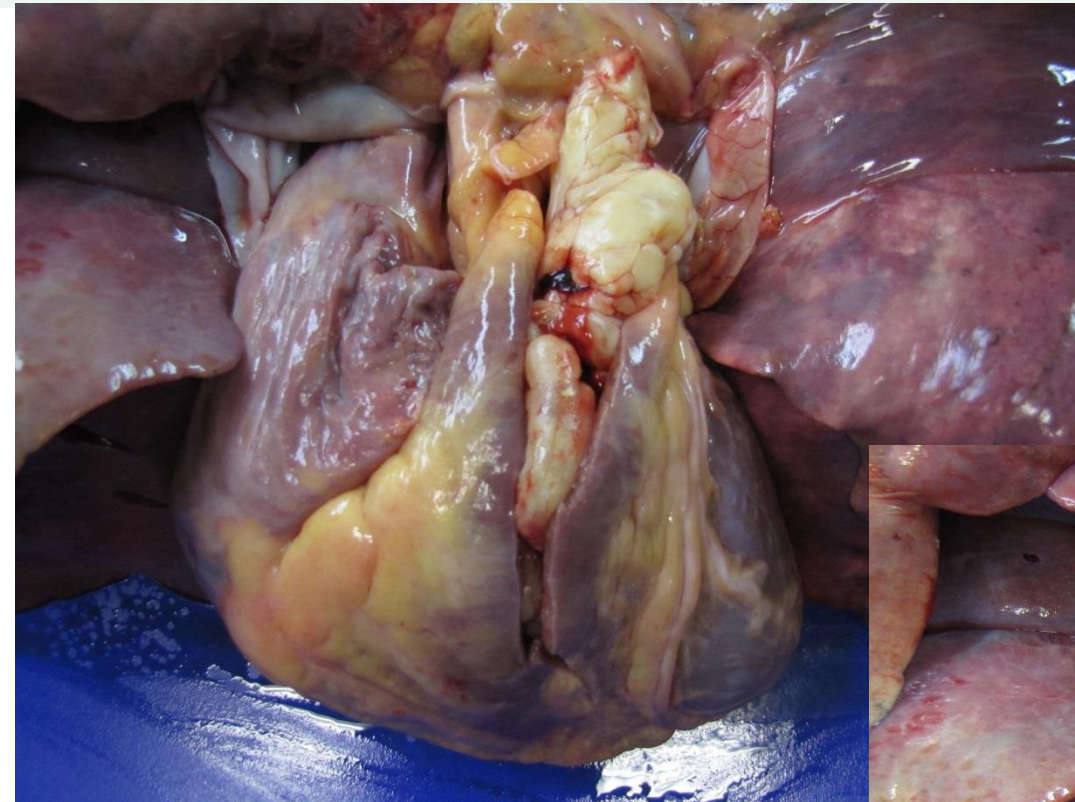
Tromboembolismo Pulmonar



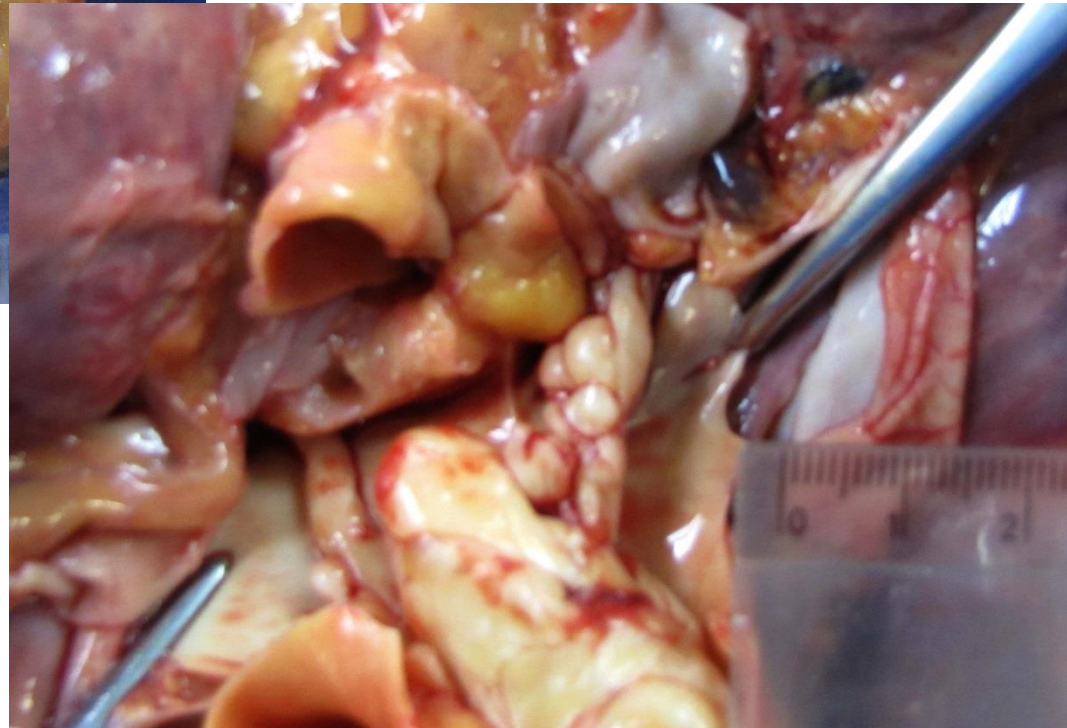
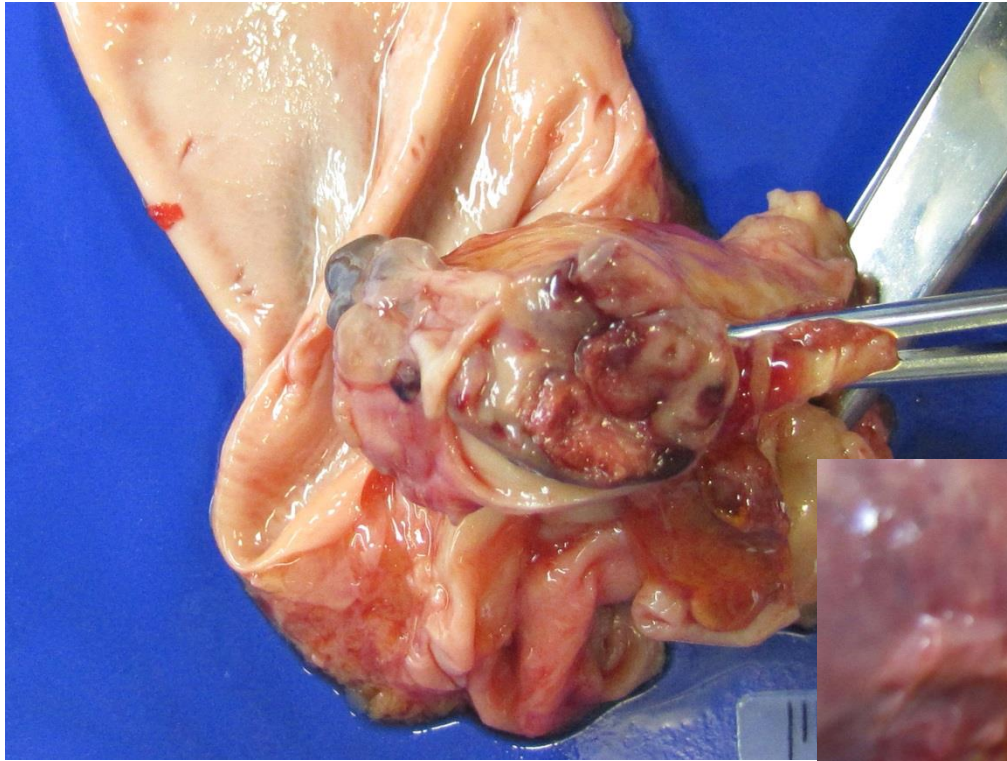
Características do Trombo



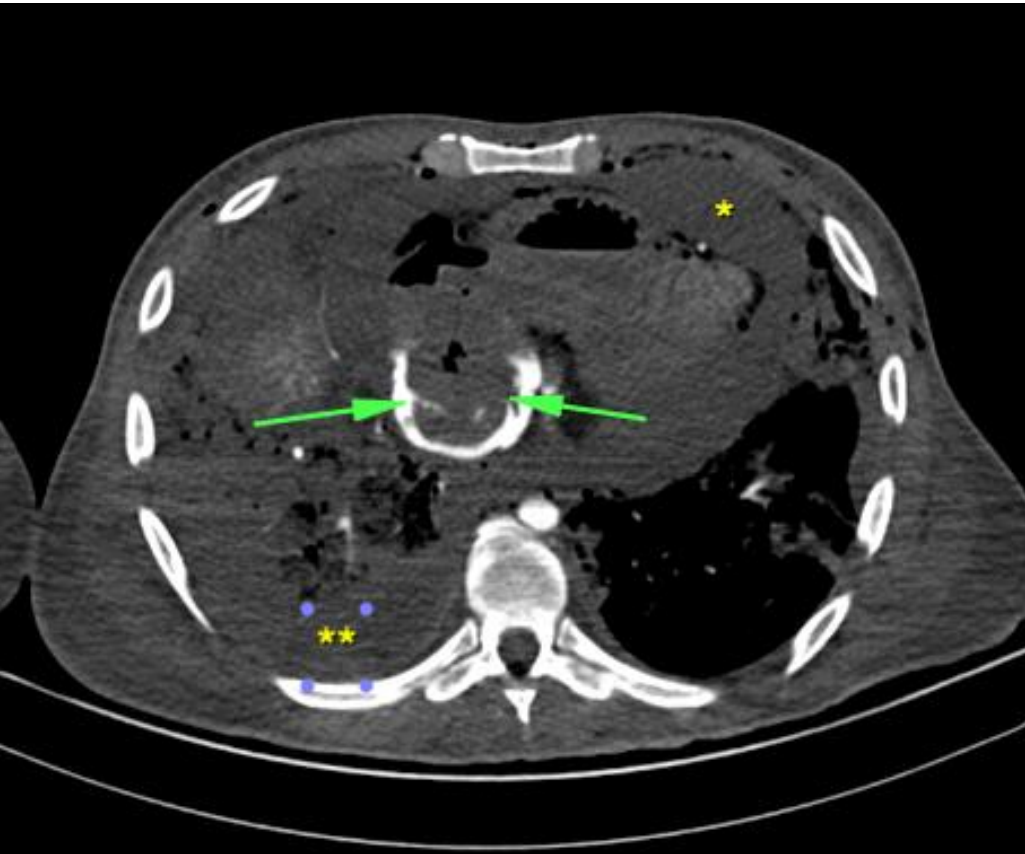
Características do Trombo



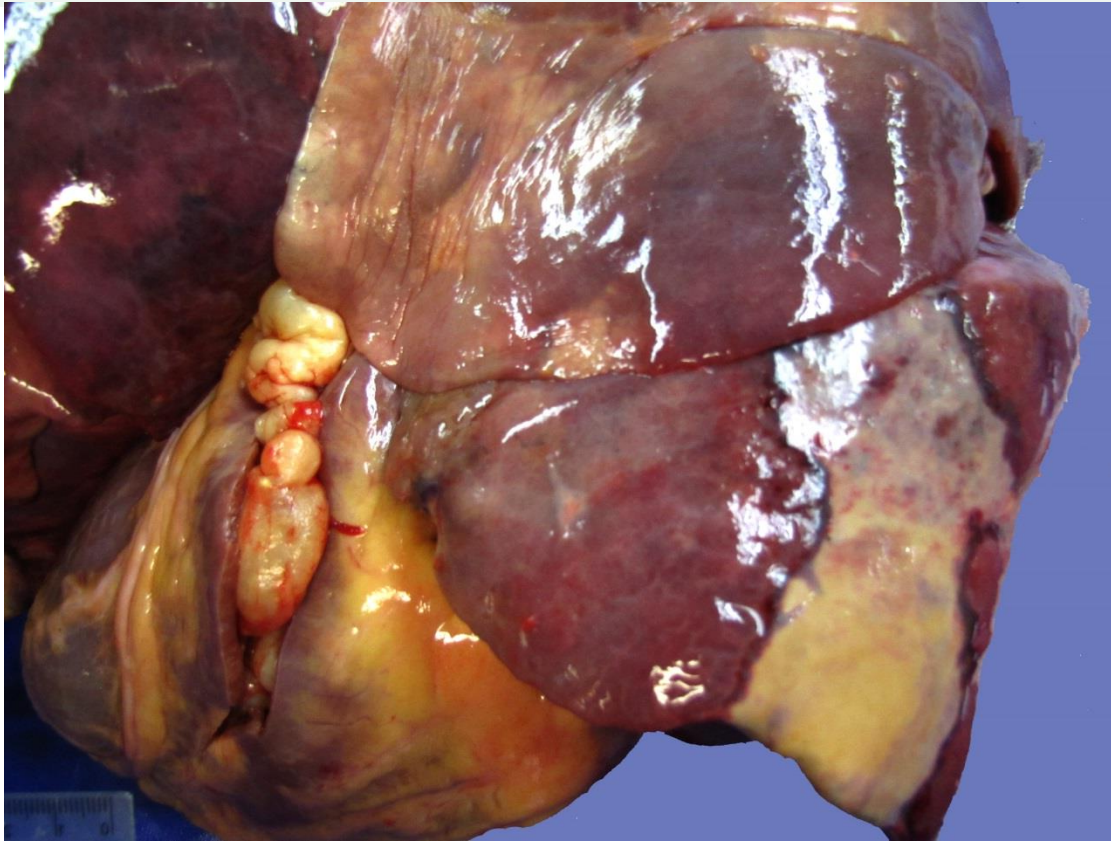
Características do Trombo



Características do Trombo



Características do Trombo



Características do Trombo



Tromboembolismo Sistêmico

- 80% provenientes das cavidades cardíacas

Embolia Gasosa

- Doença da descompressão – mergulhador
 - Alta dissolução do nitrogênio em altas pressões
 - Dor em músculos e articulações
 - Obstrução de fluxo no sistema nervoso

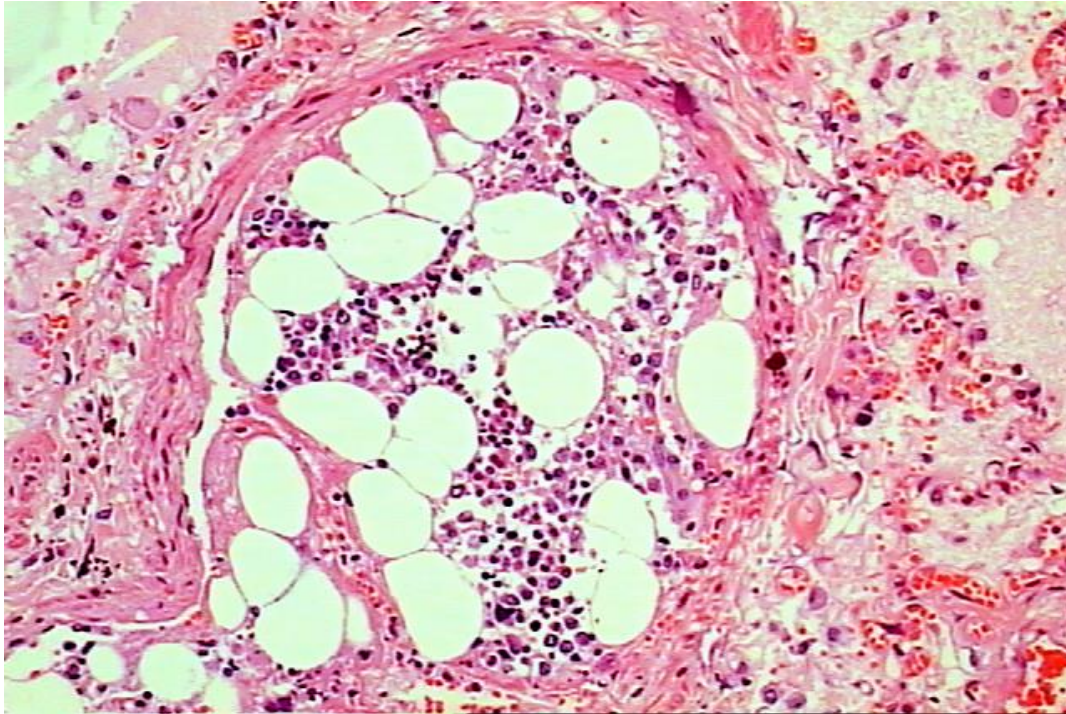
- Identificação

- Tratamento



Embolia Gordurosa

- Relação com grandes fraturas e politrauma
- Fatais em 10 a 15% dos casos
- Insuficiência respiratória, sintomas neurológicos, trombocitopenia e anemia



Embolia de Líquido Amniótico

- Mortalidade de 80% - mas é raro – 1 em 40.000
- Dispnéia, cianose e choque

