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UNIVERSITY OF MICHIGAN

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Circulatory Derangements II

HEMORRHAGE

HEMORRHAGE

Escape of blood from the C-V system

-onto the floor

-into the tissues / body cavities

Clinical Patterns of Hemorrhage

- Petechiae – 1-2 mm. hemorrhages
- Ecchymoses- blotches / bruises
- Hematoma – a mass or lump of blood
- Hemothorax – blood in the pleural cavity
- Hemarthrosis – blood in a joint
- Hemopericardium, hematosalpinx, etc….
- Purpura – a condition of widespread
  cutaneous and mucosal hemorrhages

Petechiae

Source: The Journal of Young Investigators, 2008 (jyi.org)

Ecchymosis

Source: wikimedia.org

Hematoma

Source: en.wikipedia.org

Purpura

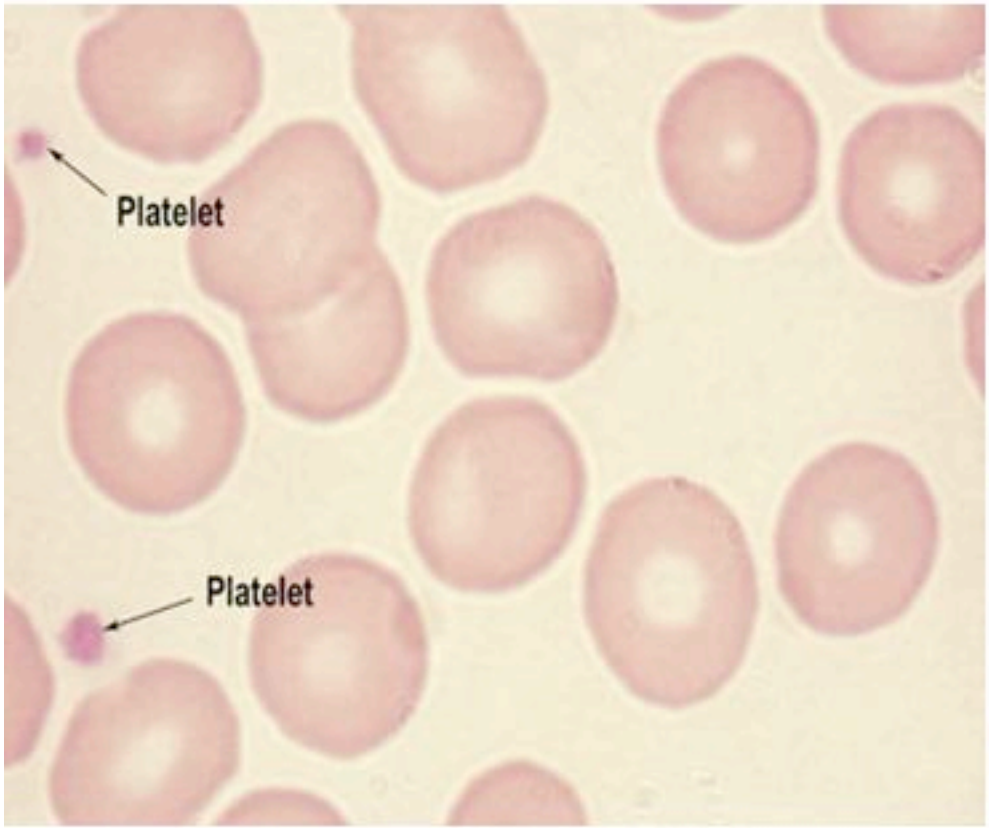
Source: Undetermined

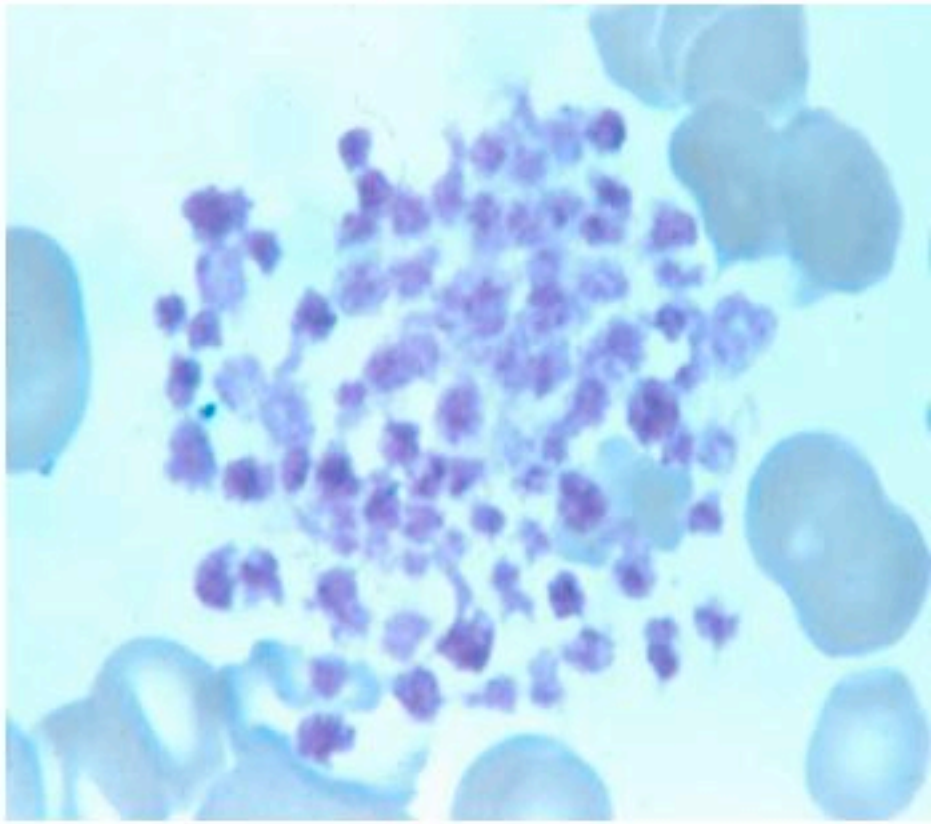
Hemostasis involves three components

- Blood vessels
- Platelets
- Coagulation system

Platelets

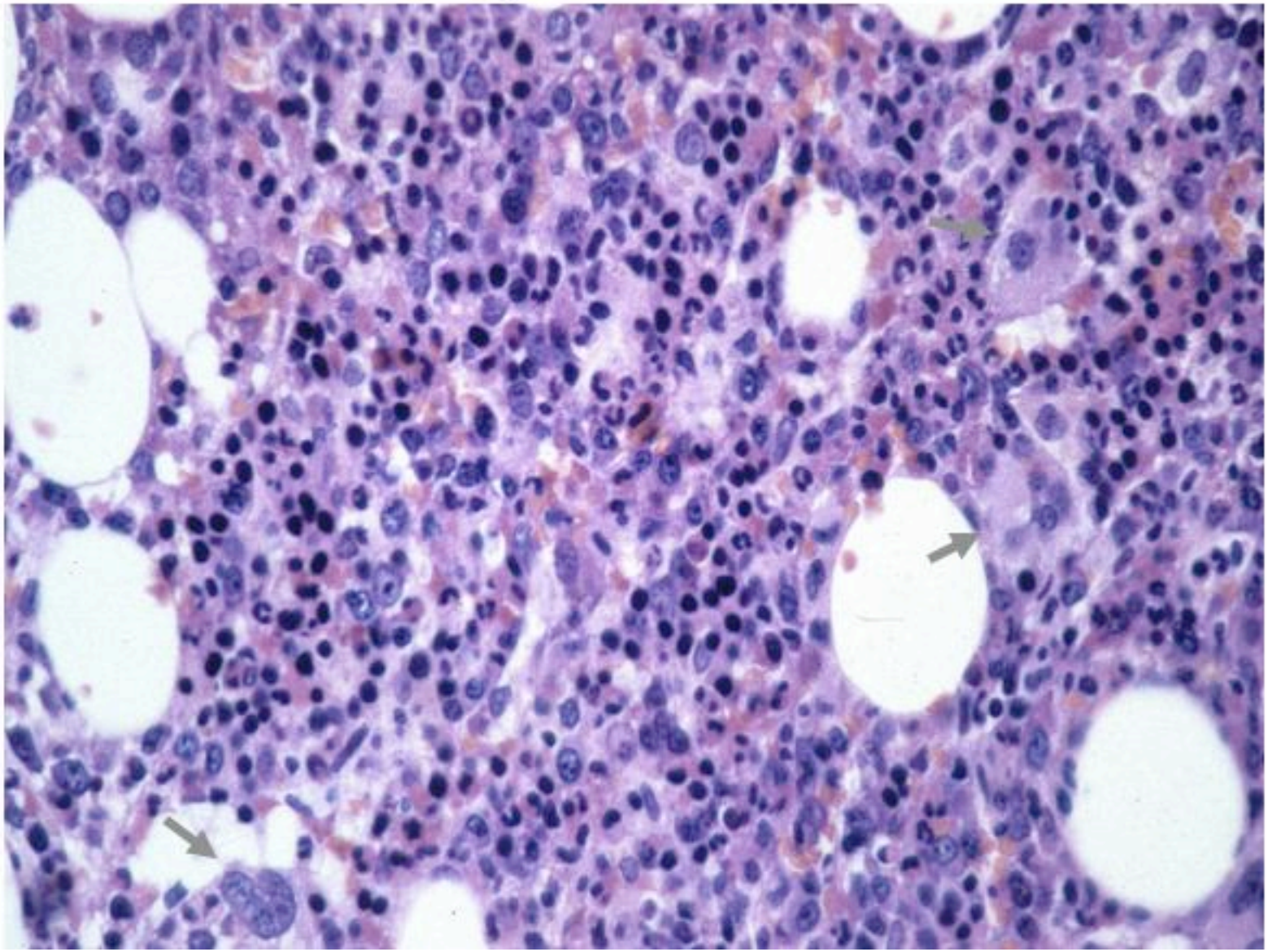
Source: Undetermined

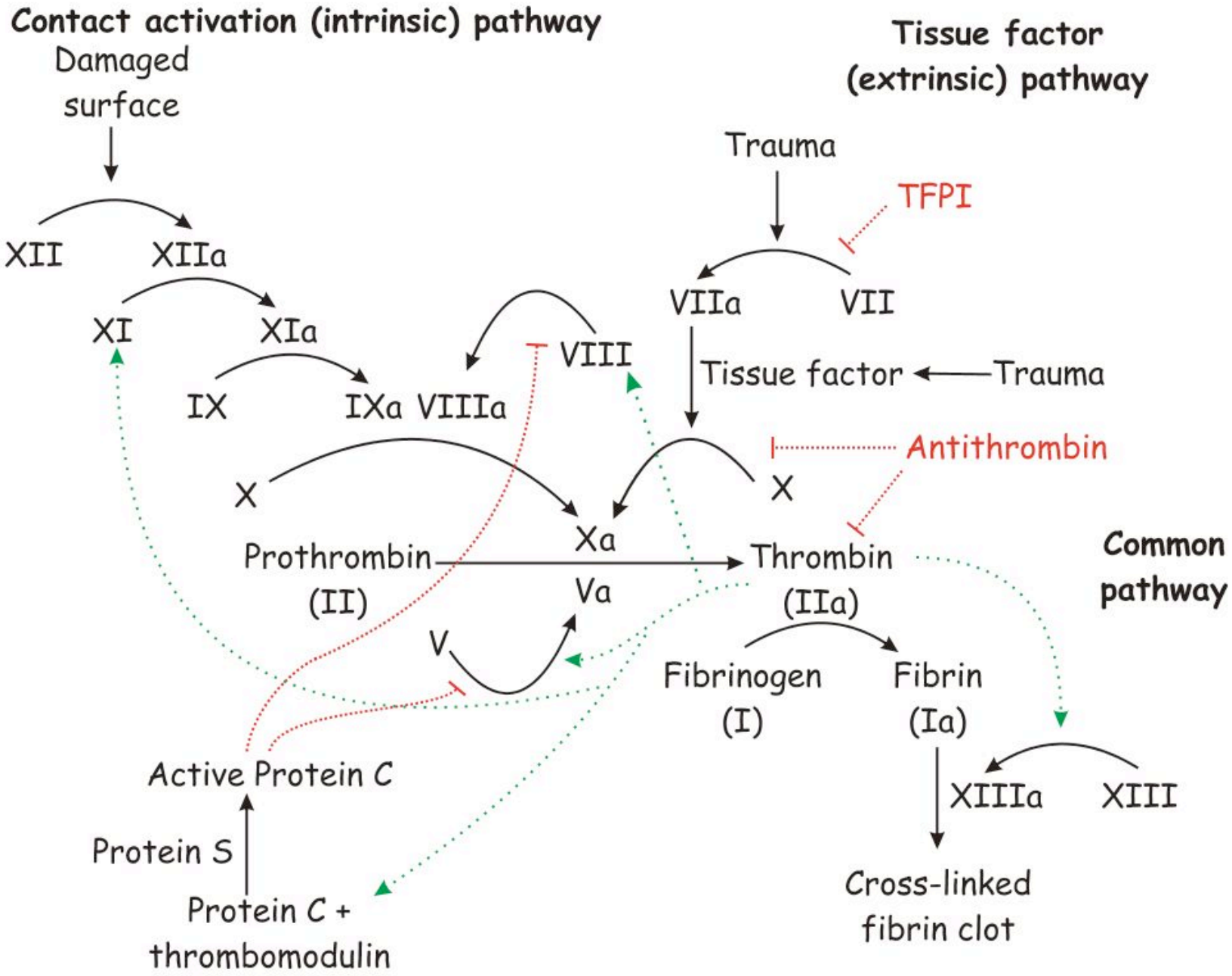




Bone Marrow

Megakaryocytes





BY: Joe D (wikimedia.org)
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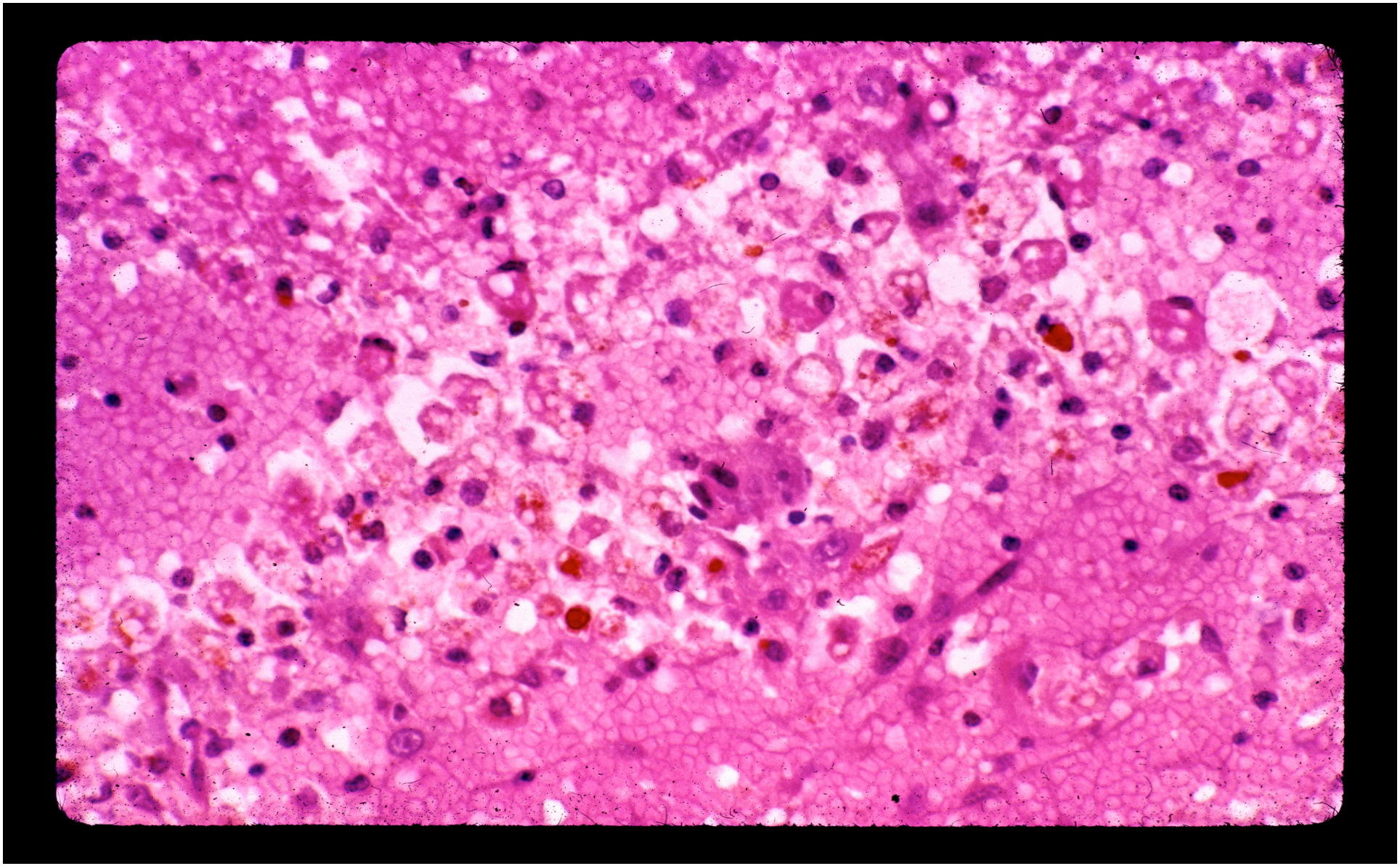
Ecchymosis - Fresh

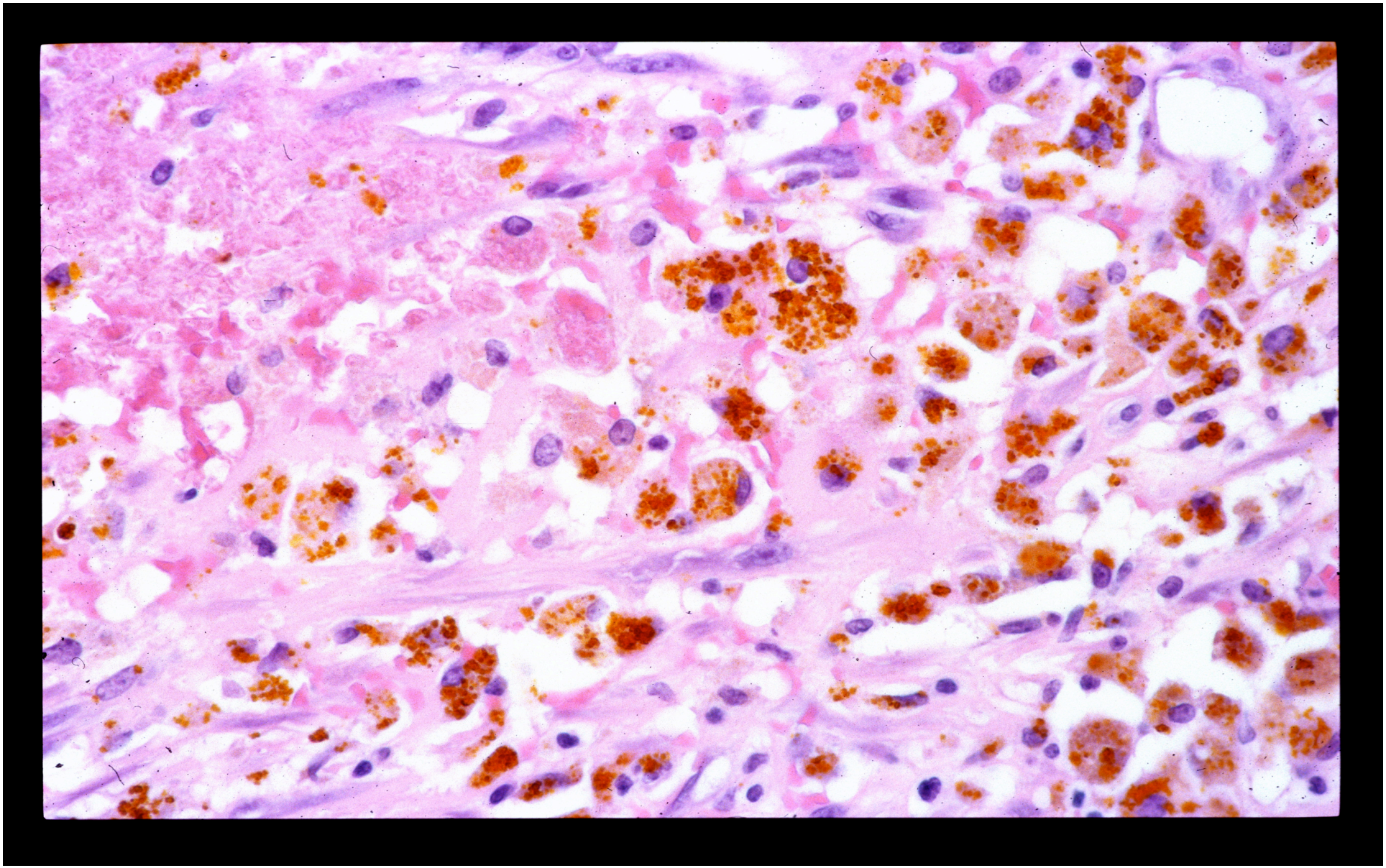
Ecchymosis - Resolving

Ecchymosis - Resolving

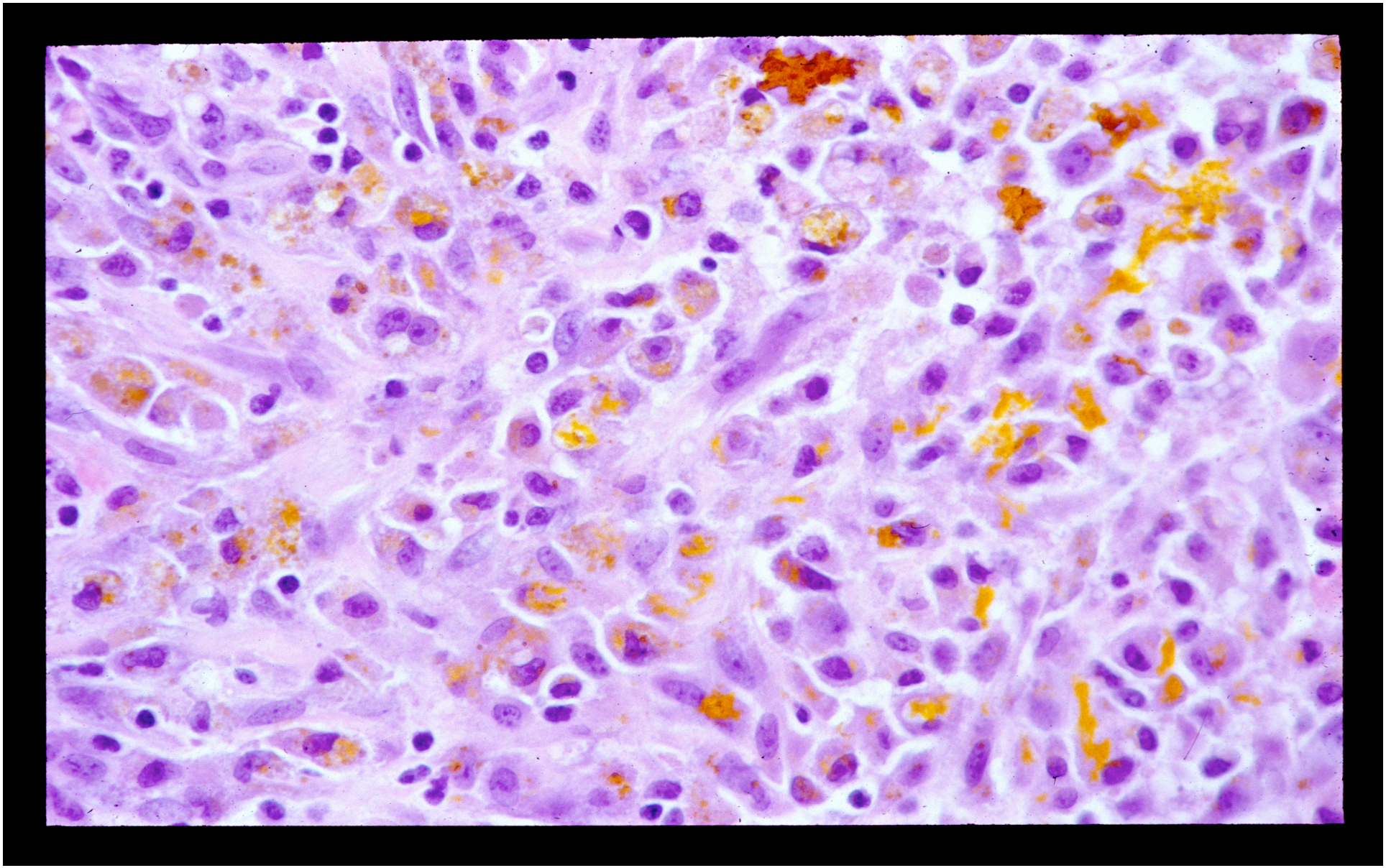
Erythrophagocytosis



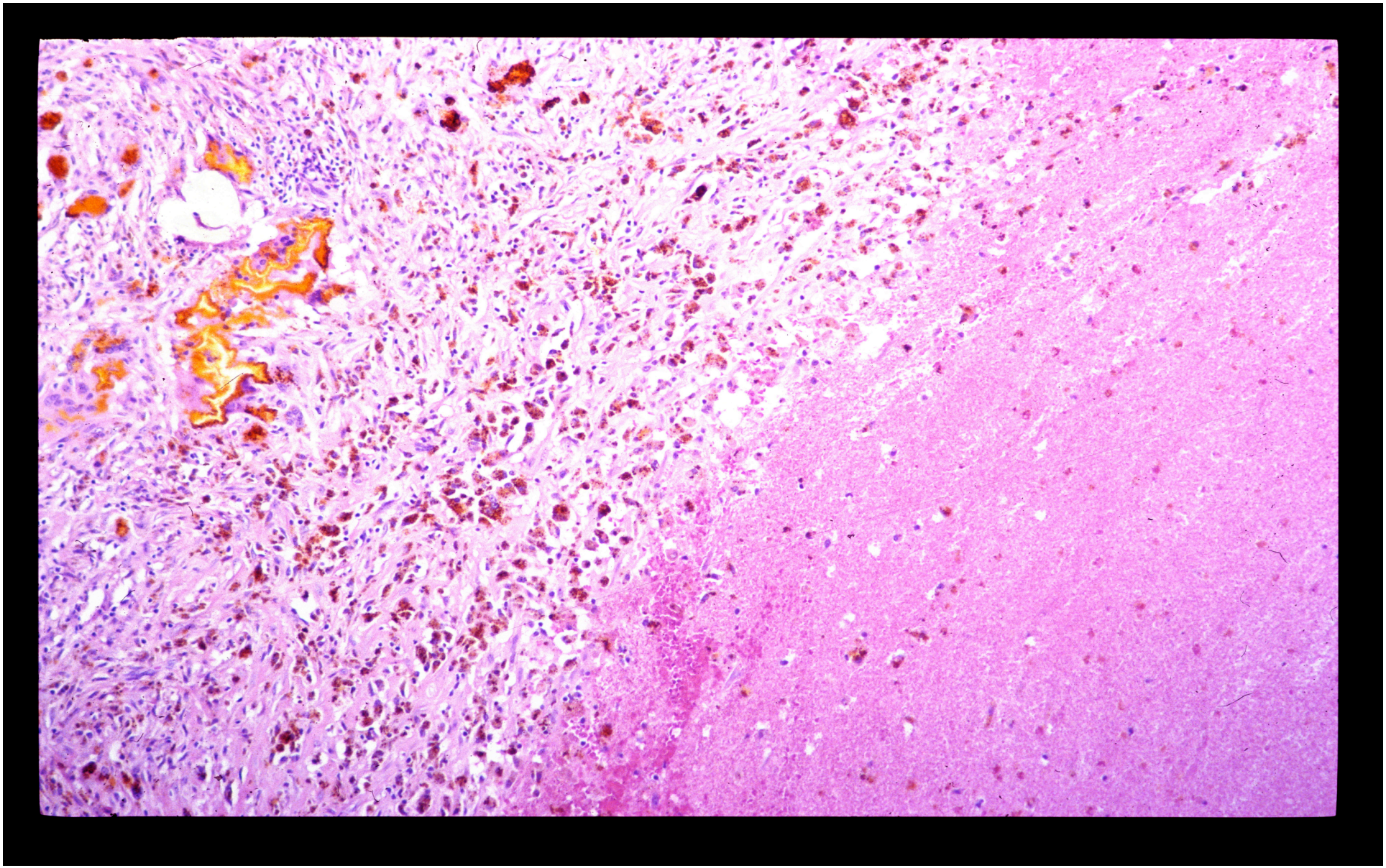
Hemosiderin



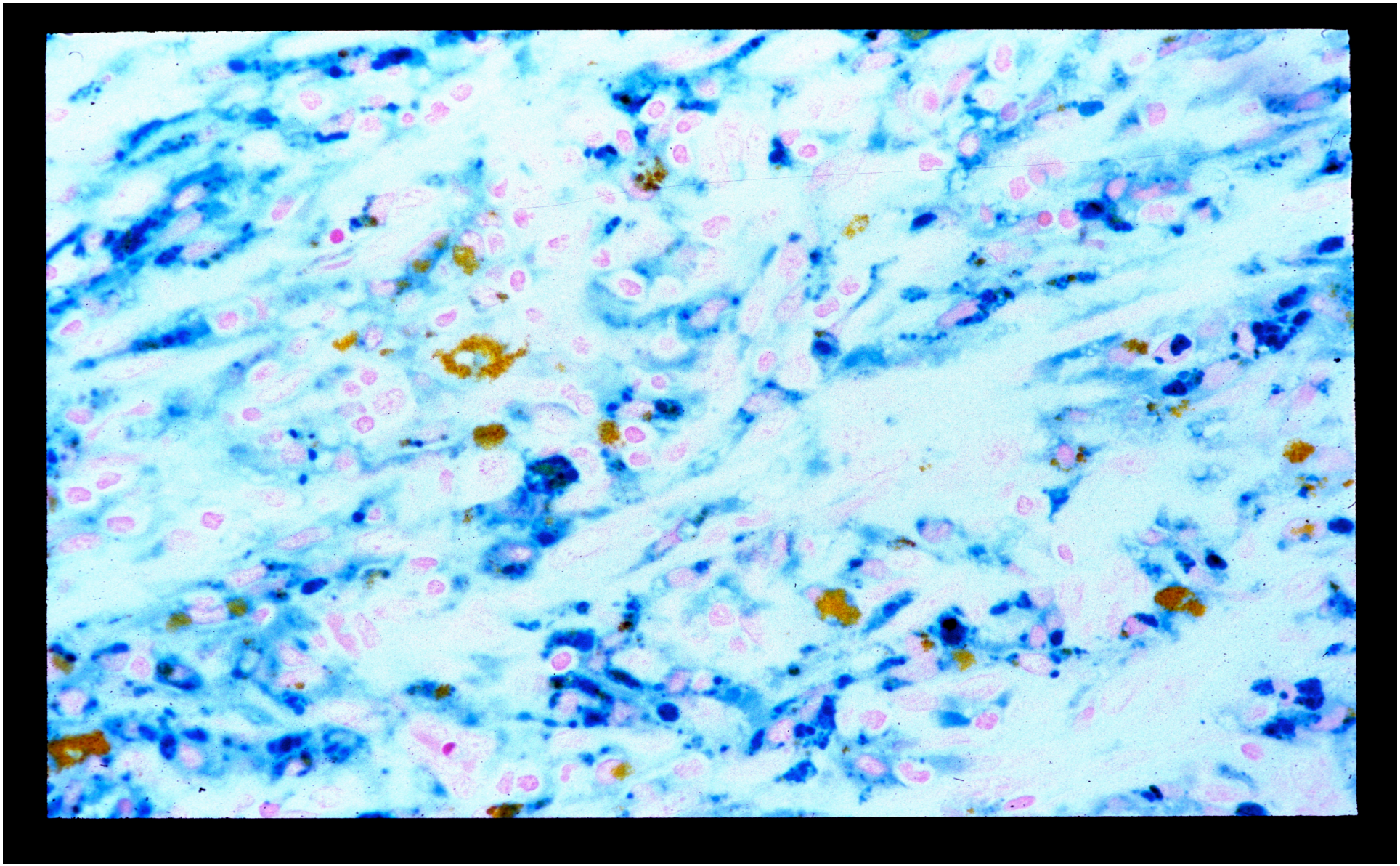
Hematoidin



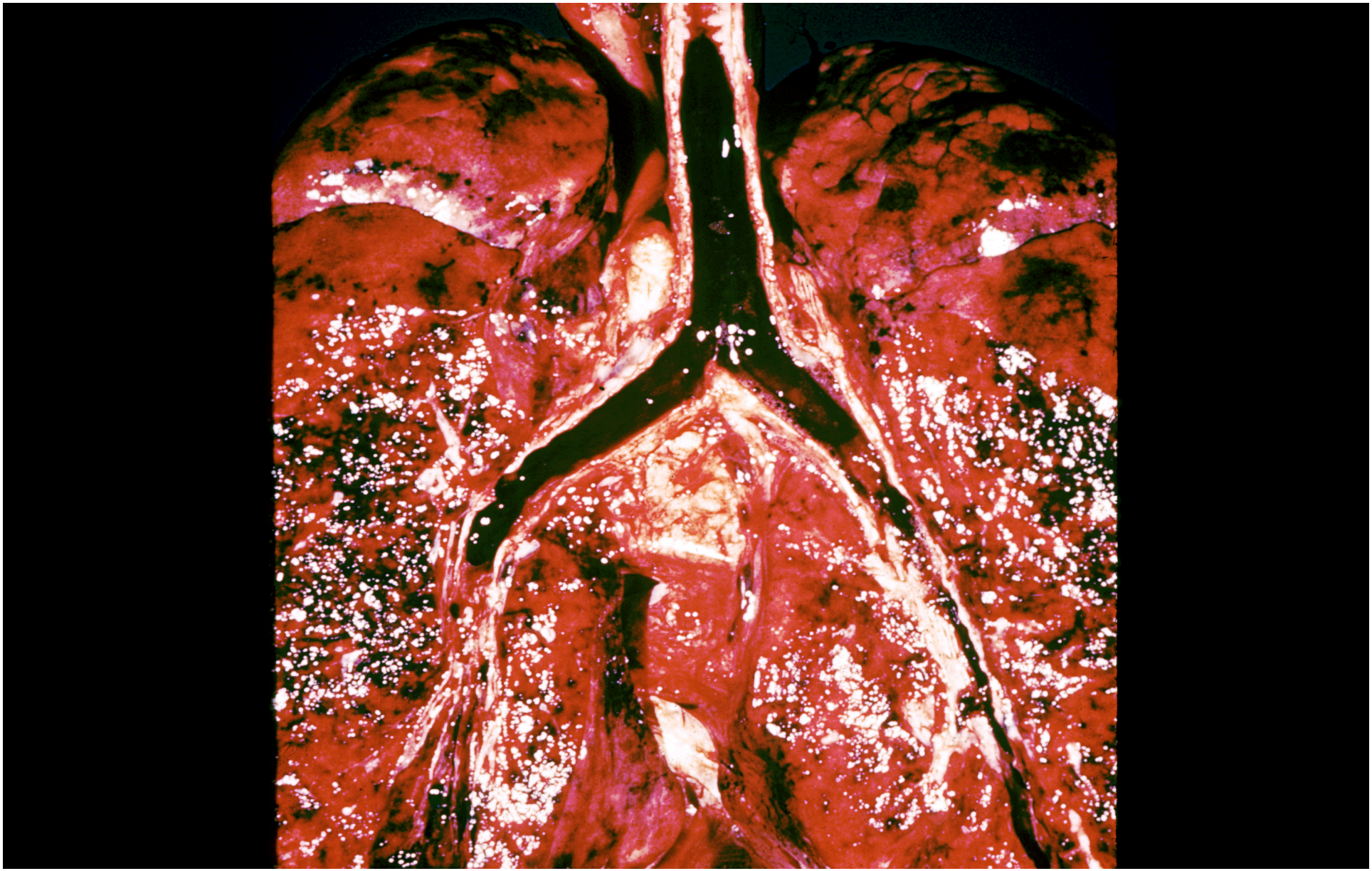
Hemosiderin & Hematoidin



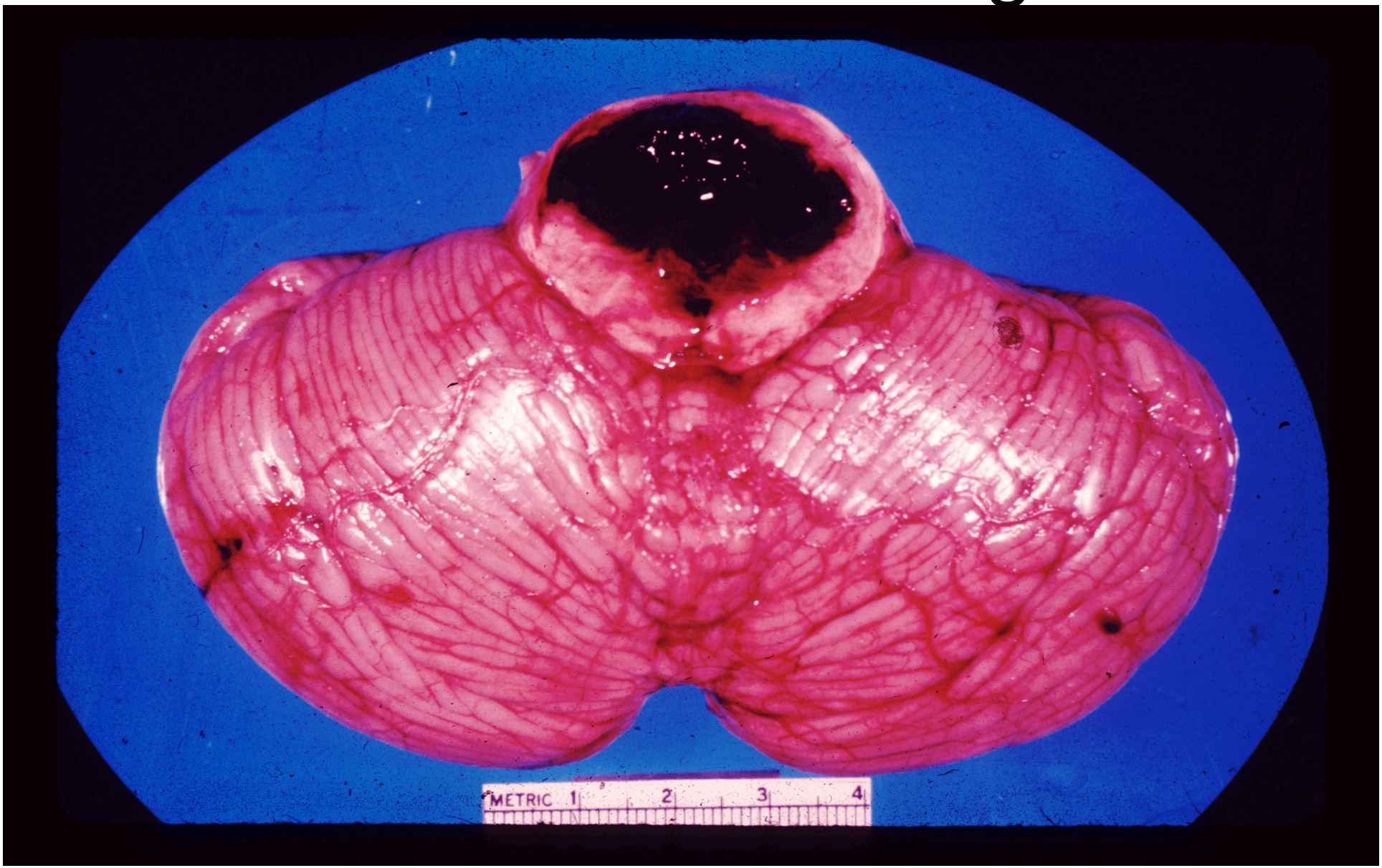
Hemosiderin & Hematoidin
Iron Stain



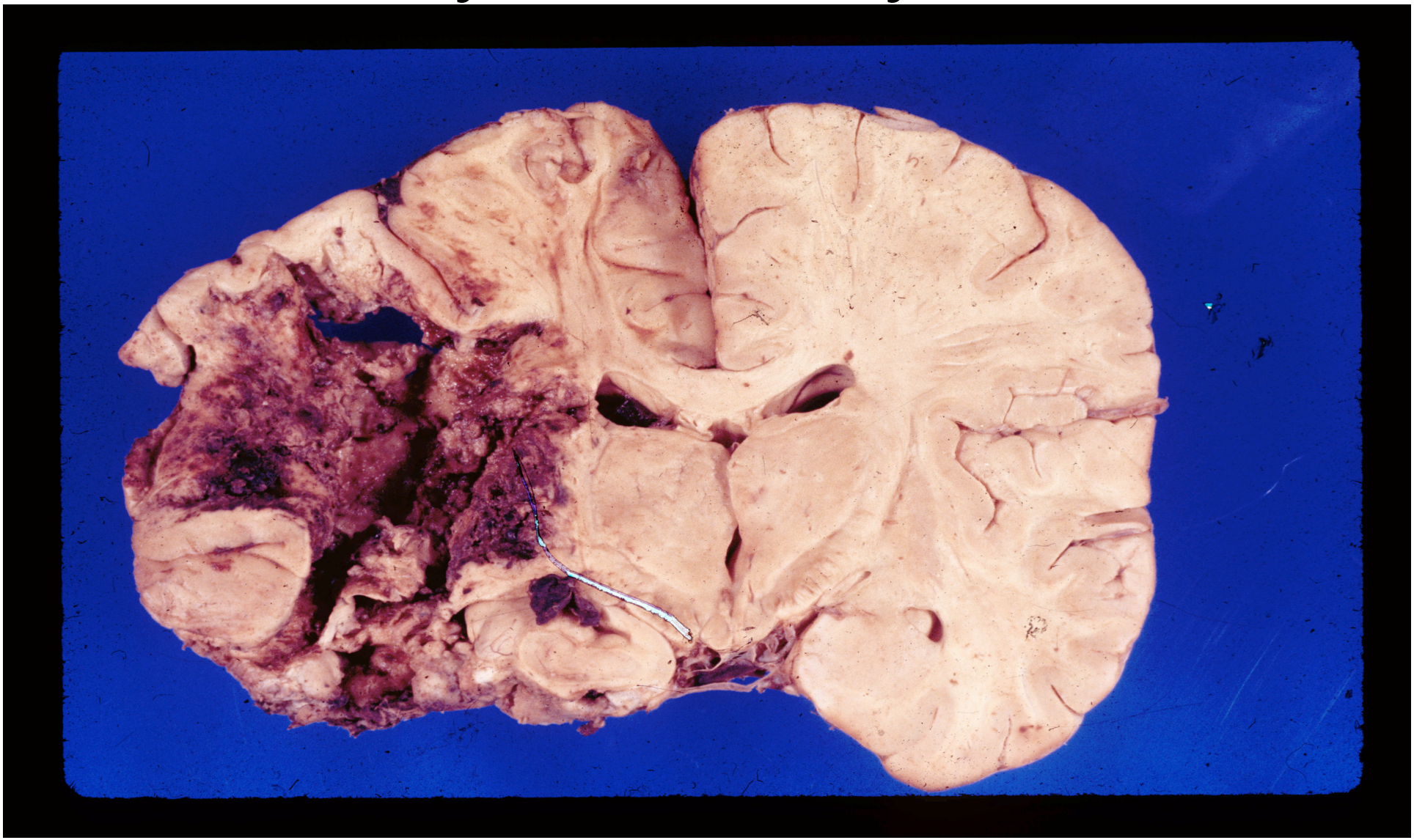
Aspirated Blood



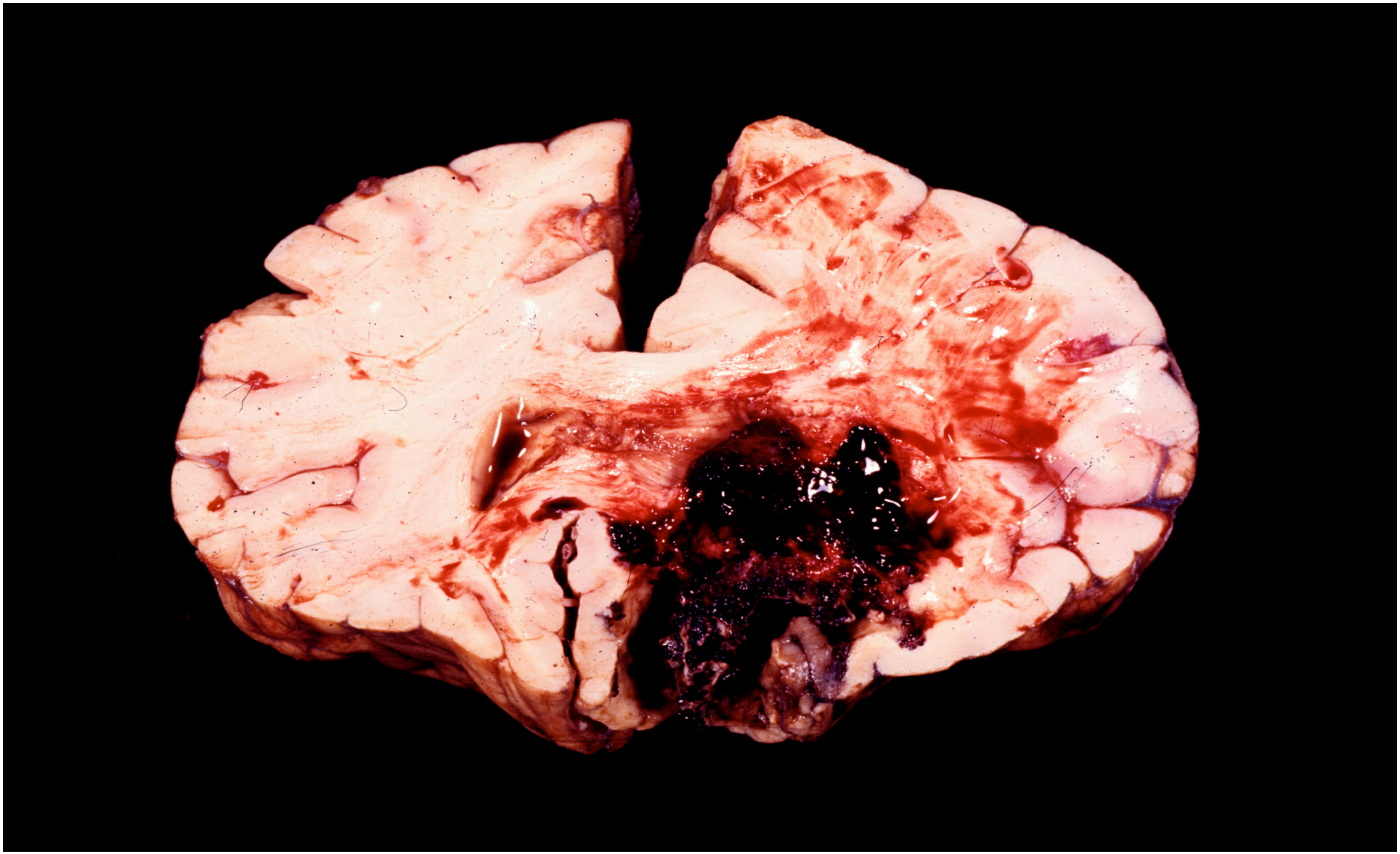
Pontine Hemorrhage



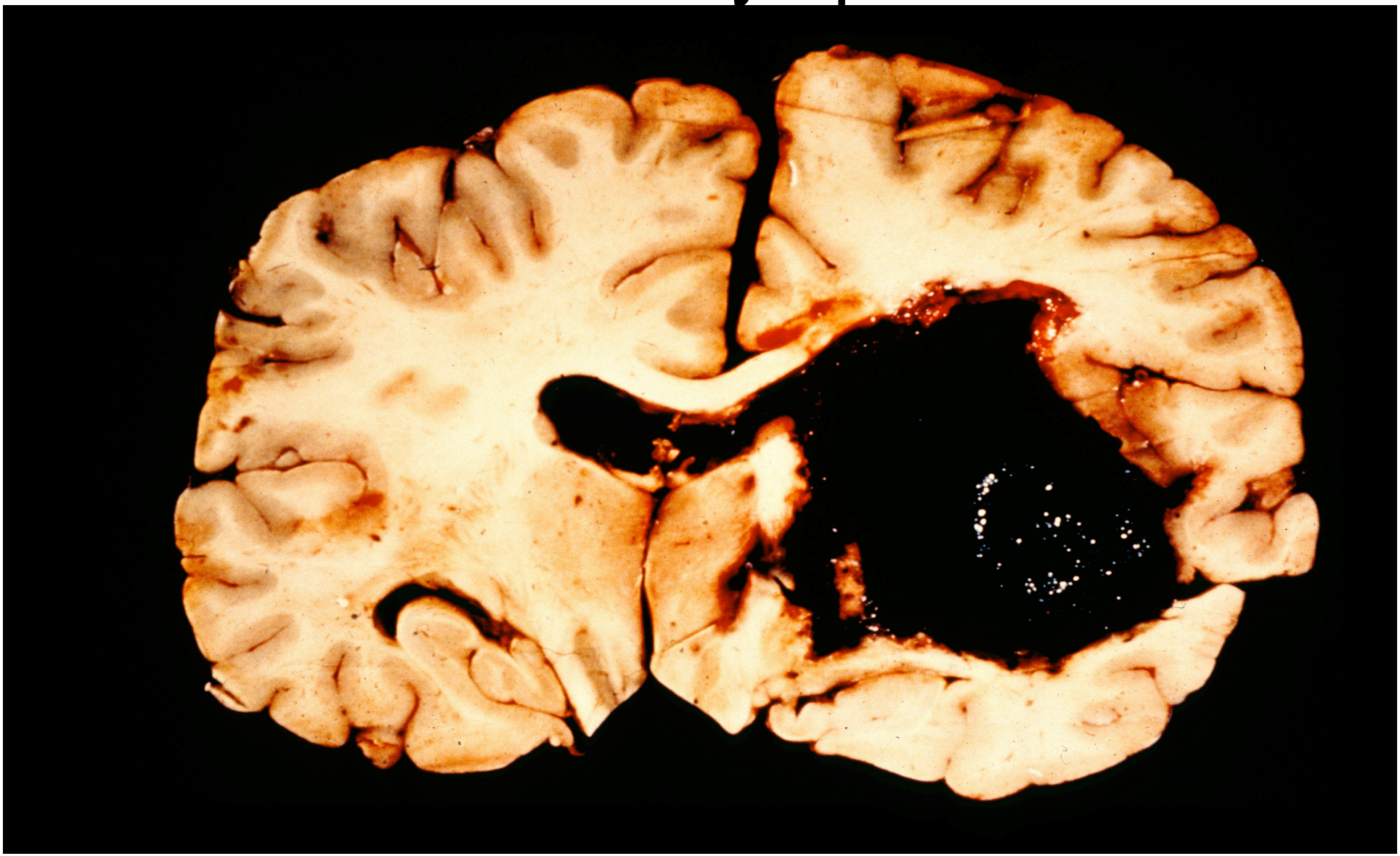
Cerebral Hemorrhage
Mycotic Aneurysm



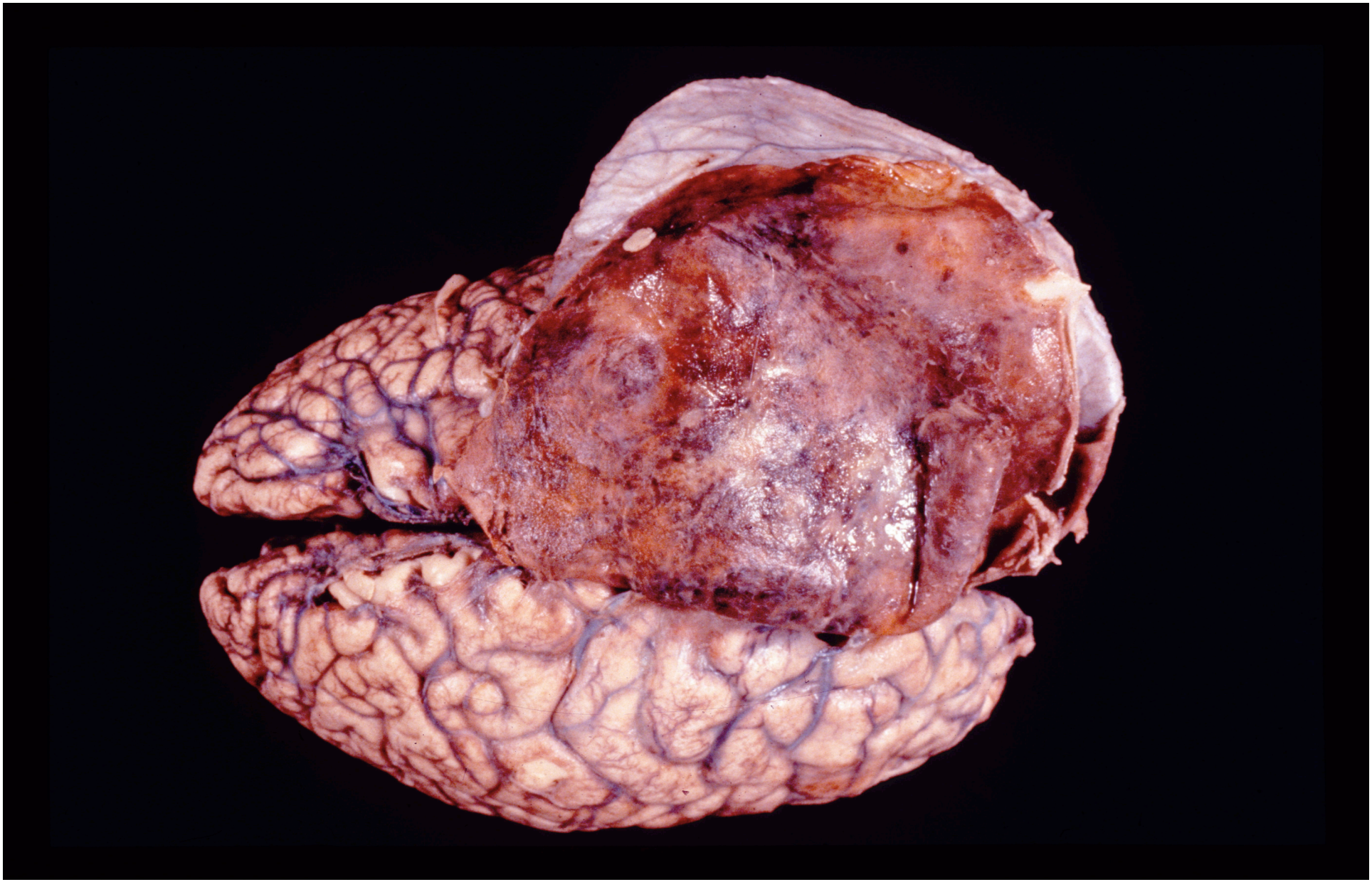
Cerebral Hemorrhage Hypertensive



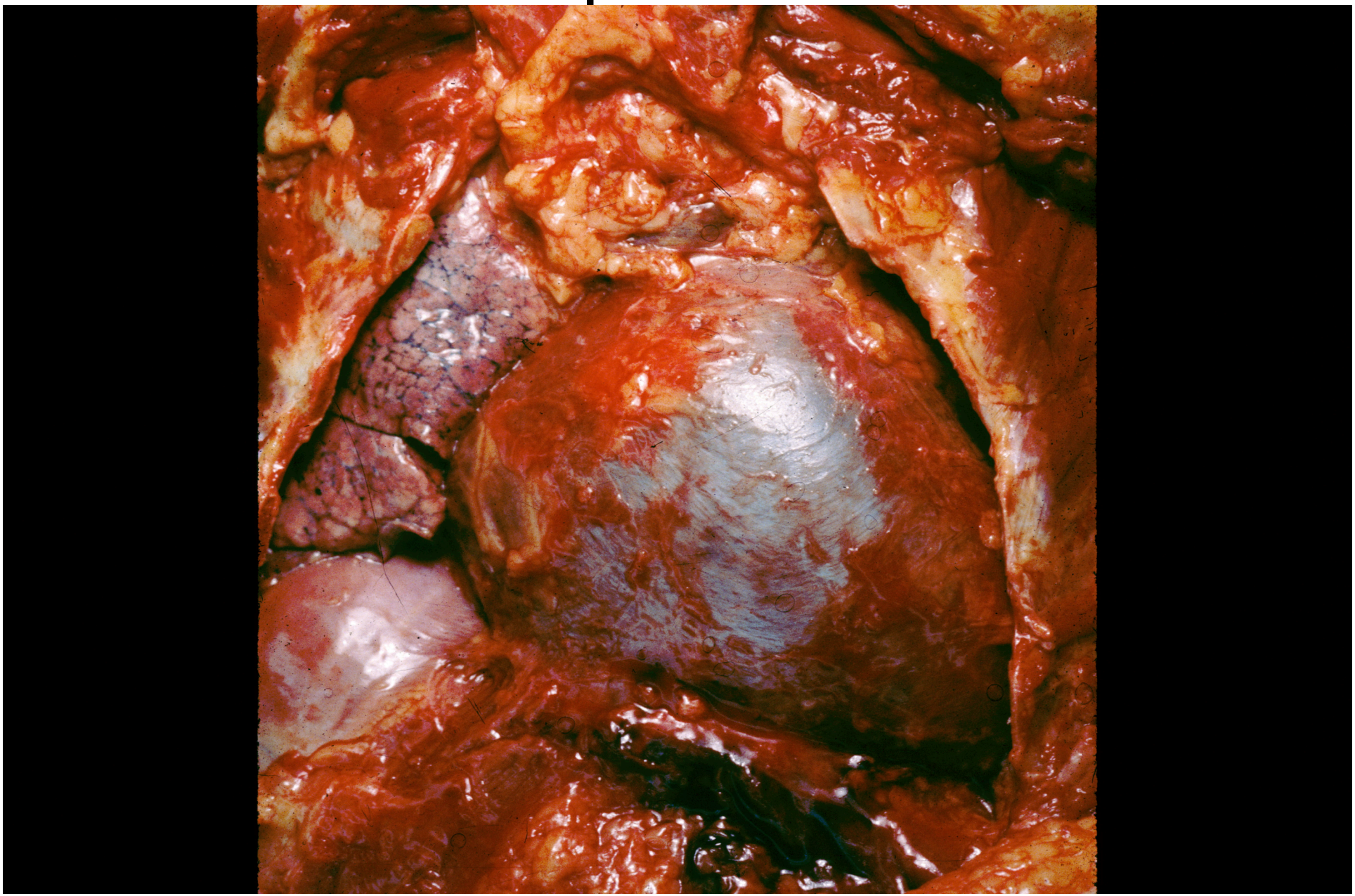
Cerebral Hemorrhage Thrombocytopenic



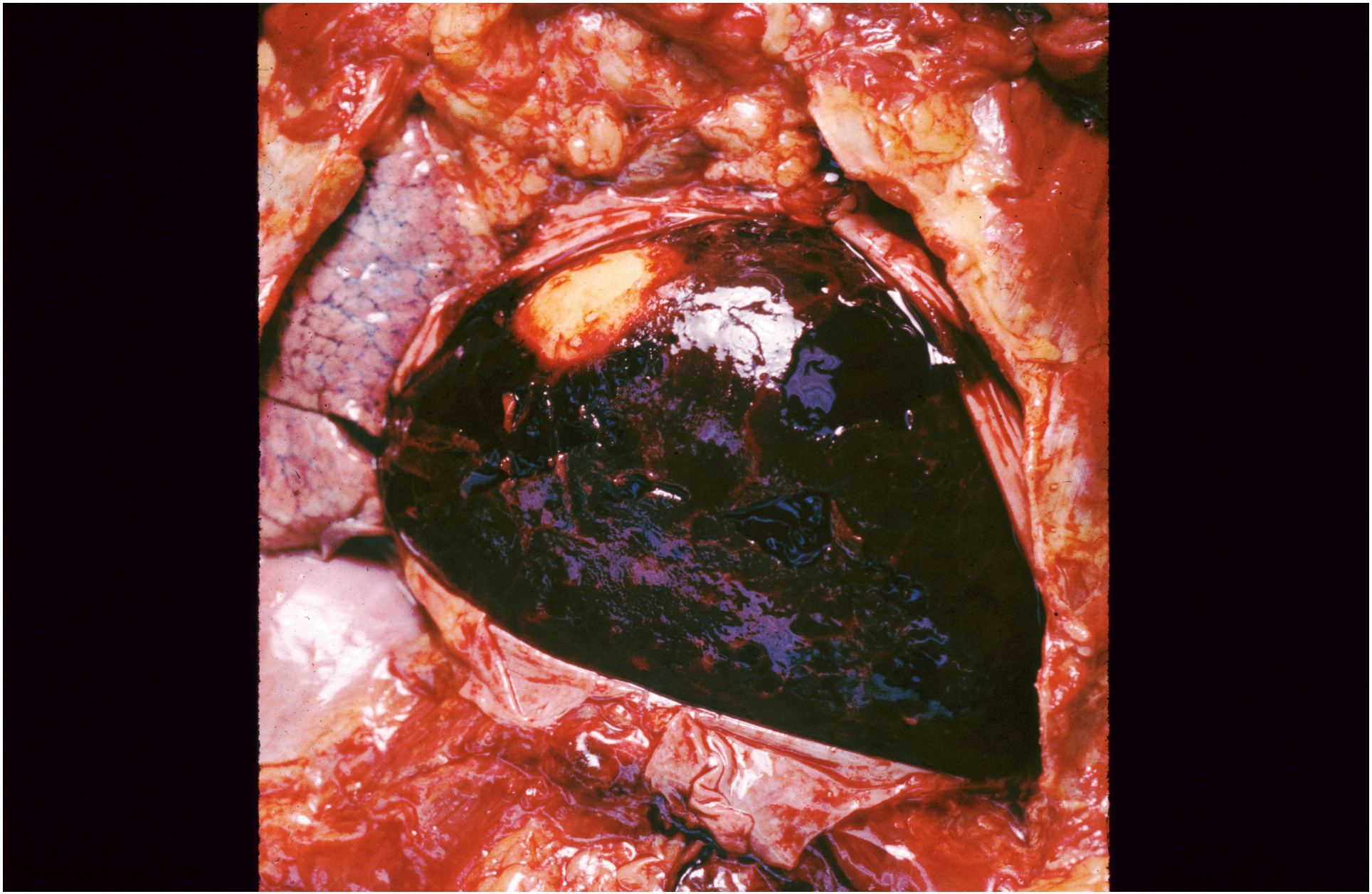
Subdural Hematoma



Hemopericardium

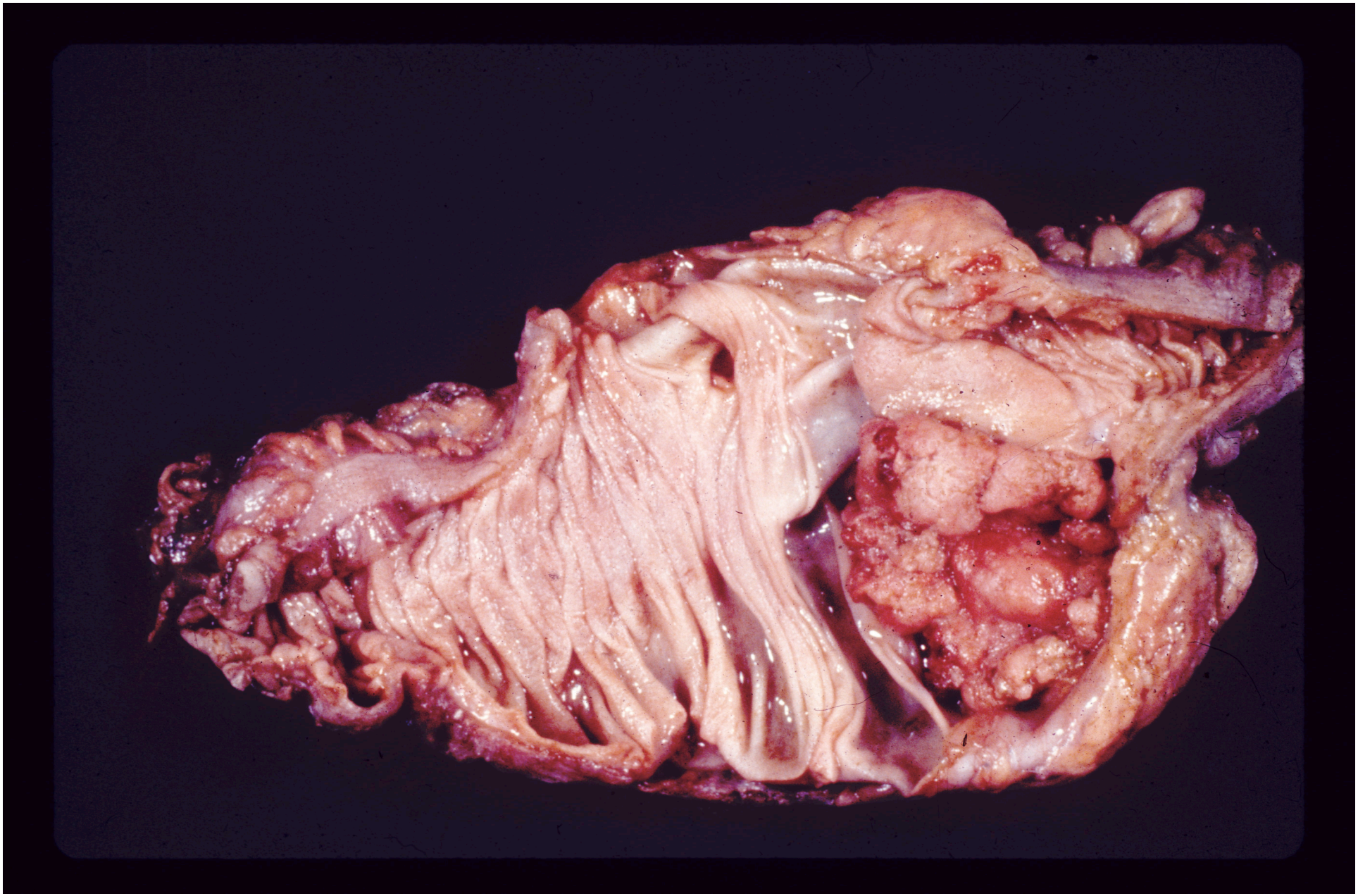


Hemopericardium



Systemic Effects of Hemorrhage

- Exsanguination
- Shock
- Anemia of Chronic Blood Loss

Liver - Lacerations

Cecal Carcinoma