Burkhardt/Lang Autopsy Series
Reutlingen, Germany

Case #18

Publication consent has been granted 5718 / 21

26 blocks from the [redacted] Department

Born 06.05.1992, died 06.07.2021

M 29J 1x Astra, 1x BioNT 134/46 d

18.1 Death and Vaccination History.

2 vaccinations took place at [redacted] about 4 weeks before death

- 1st vaccination: 22.2.21 Astra Zeneca Lot ABV 3025, Death 134 days later
- 2nd vaccination: 21.5.21 Comirnaty (BioNTech). Ch.-B. EX3510, Death 46 days later

18.2 History of Present Illness

Death on **6.7.21** after seizure on **5.7.21** and emergency admission to hospital. Barbecued during the day on July 5, fine, only laid down briefly afterwards because of a slight headache. Recently, he has often reported such mild headaches. In the evening, the family (the deceased's young son and his companion) sat together.

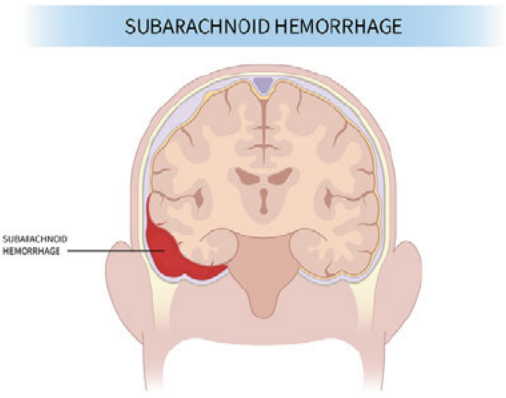
Since Mr. xxxx was on duty at the hospital quite early the next day, he did not drink much. He did not take drugs.

Late in the evening, he was found by his companion convulsing. Emergency medical intervention was provided with circulatory stabilization. Relatives affirm on repeated inquiries that Mr. xxxx does not take drugs.

The Goppingen hospital refuses admission because the intensive care unit was filled with Corona cases and was working to capacity.

He was transferred to intensive care [redacted] where he received a wide range of drugs. Alcohol screening was negative. CT scan showed a **bihemispheric subarachnoid hemorrhage**.

A single sided subarachnoid hemorrhage pictured below.



https://www.advocatehealth.com/health-services/brain-spine-institute/intracranial-hemorrhage/subarachnoid-hemorrhage

The patient was transferred to the neurosurgery department at [redacted] the same night. Brain death was determined there.

Death occurred on 6.7.2021 at [redacted] Hospital.

18.2 Past Medical History.

No relevant previous illnesses known

18.3 Autopsy Pathology [redacted]

Cause of death: Subarachnoid hemorrhage (central death).

Cadaver of a slim, athletic young man.

- **Lungs:** Marked anthracosis, respiratory bronchiolitis with interstitial lung disease, "condensation pneumopathy" with prominent macrophage-associated pigment deposits with pronounced macrophage proliferation (CD 68). Berlin blue staining revealed anthracitic pigment and faintly stained iron deposits. No evidence of pulmonary embolism was noted.

- **Heart:** A few signs of chronic, uncharacteristic myocarditis (CD15, CD3, CD20, CD68, CD4, CD8)

- **Brain:** Recent subarachnoid hemorrhage with punctum maximum in the area of the base of the skull, which is secondary to the temporal lobe and lateral ventricle.

- **Cerebral arteries:** The basal arteries were softened. An aneurysm leading to hemorrhage could not be detected. No inflammatory changes or indications of a tumor.

18.4 Consultant diagnosis Reutlingen. (Burkhardt, Lang)

2 Liver:

- Minor to marked periportal inflammation, lymphocytes in the vascular wall of the liver.
- Central vein and surrounding area, lymphocytic endotheliitis and vasculitis ++.

3 Spleen:

- Significant lymphocytic endovasculitis +++ in the large arteries, sporadically activated follicles, red pulp dehisced.
- Larger arterial vessels with stove-shaped, onion-shelled loosening of the wall layers +++.
- Spike S1 IHC: Weak labeling of exfoliated endothelial cells and weakly positive perivascular lymphocytic elements.
- EVG, amyloid and spike, IgGs according to immune complexes in vessels

4-5 Kidney: age-appropriate normal findings with cortical adenoma as a harmless incidental finding

6-10 Lung:

- Perivascular lymphocytic infiltrates ++.
- Nodular lymphocytic infiltrates subpleural
- Focal also strong lymphocytic component. ++.
- Macrophage-rich alveolitis, probably pre-existing; alveolar macrophages with smoker's pigment (smoker's lung).
- 5- Spike S1 IHC: negative MIB: NOT YET DIAGNOSED

11-14 Myocardium:

- No atherosclerosis according to age.

- Endothelitis +++ with destruction and lymphocytic infiltration as evidence of an intravital process.
- Focal mild myocarditis + predominantly subepicardial.
- Loosening of the arteriolar walls.
- Spike: occasional perinuclear, slightly nuclear positive reactions in about one third of the nuclei of myocytes, but also of interstitial cells. Isolated weakly positive.
- Occasional weakly positive Berliner Blue

(13) - NOT YET DIAGNOSED CD3
(13) - NOT YET DETERMINED CD20
(13) - NOT YET FOUND block

13: MIB1, CD31, CD34, CD3, CD8 CD4, spike, block 10 MIB

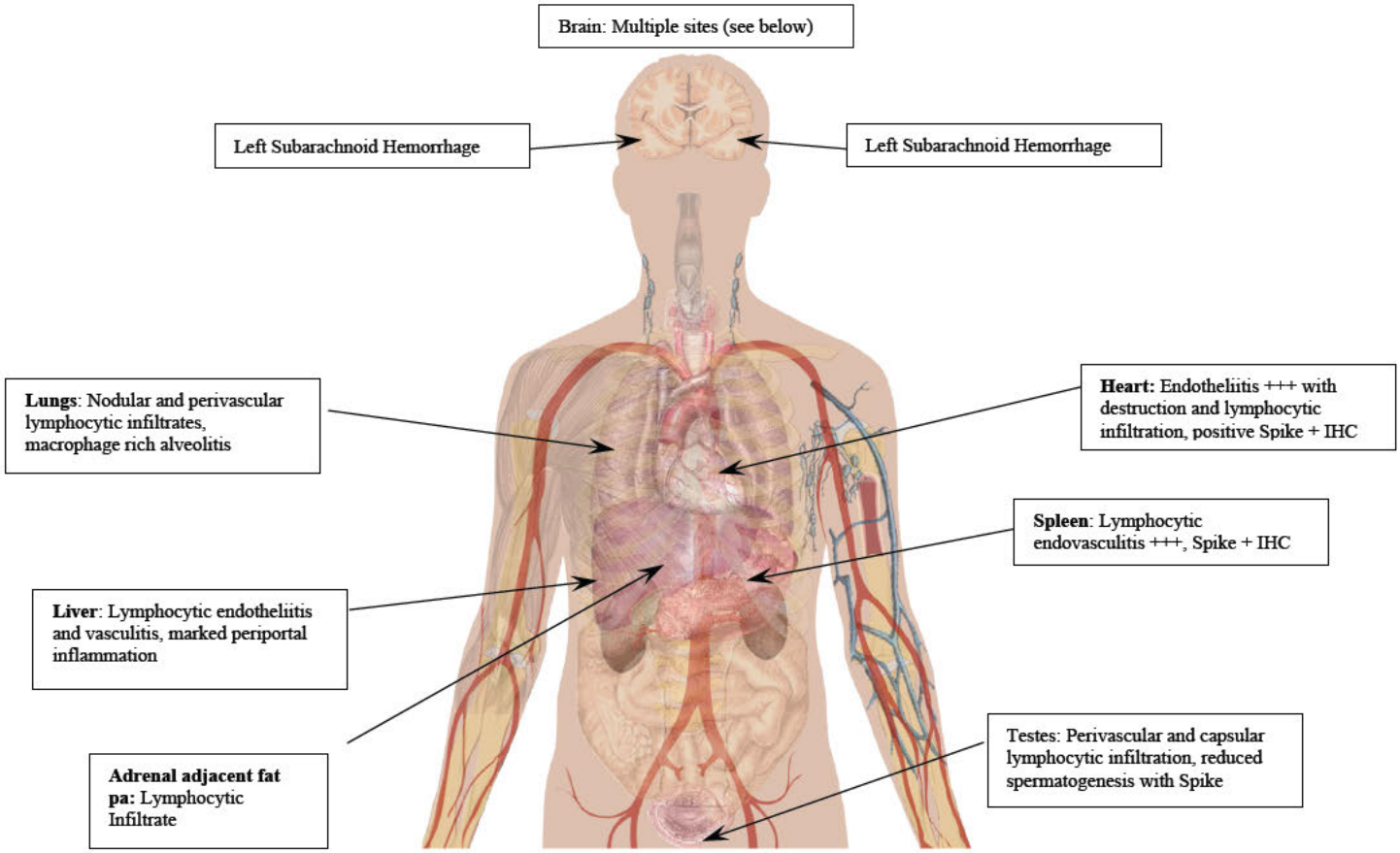
15 Adrenal gland: Normal findings, but slight lymphocytic infiltrates in the adjacent fatty tissue (+)

16 Pancreas: autolysis, not assessable

17 Testes:

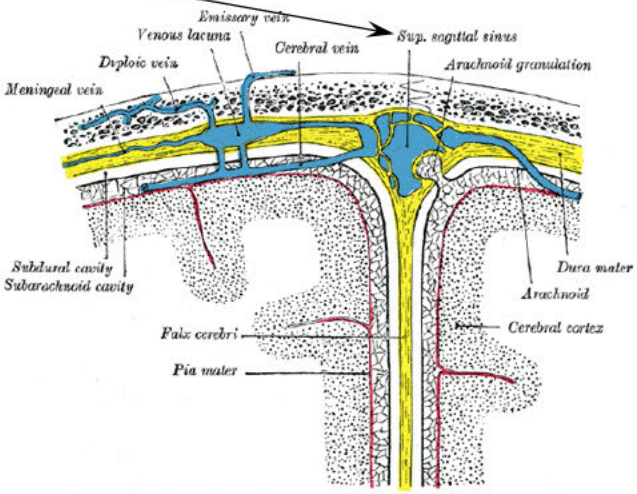
- Minor lymphocytic inflammation in the capsule, partly perivascular with vascular wall loosening.
- Reduced but present spermatogenesis.
- Maturation preserved, but large cells also in the lumen in the sense of stratification during spermatogenesis.
- Spike S1 IHC: Clustered marked spermatogonia, also in the lumen positively marked positive elements.

18 Bone marrow: age-appropriate regular hematopoiesis, lipomatosis



Brain: Neuropathology consultation required

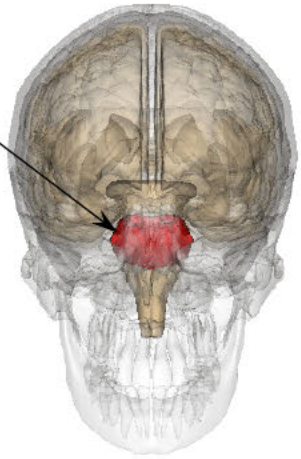
Superior sagittal sinus



https://commons.wikimedia.org/wiki/File:Gray769.png

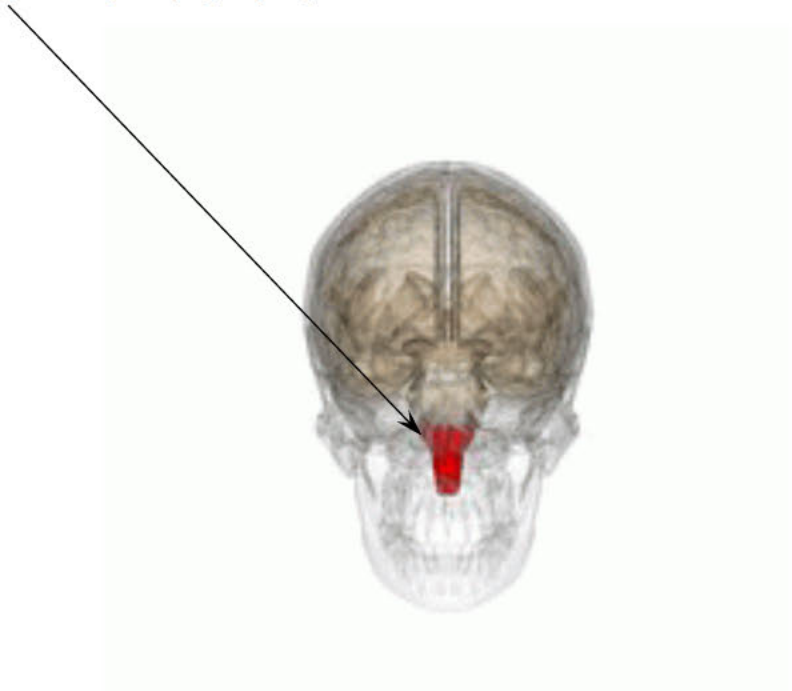
- Nodular lymphocytic infiltrates, minor endotheliitis with exfoliation and fresh thrombus.
- Spike S1 IHC: Focal, clear expression in the endothelia of the arachnoid vessels.
- Spike expression also of lymphocytic inflammatory infiltrates.

Pons: Mild lymphocytic perivascular infiltrates (+)

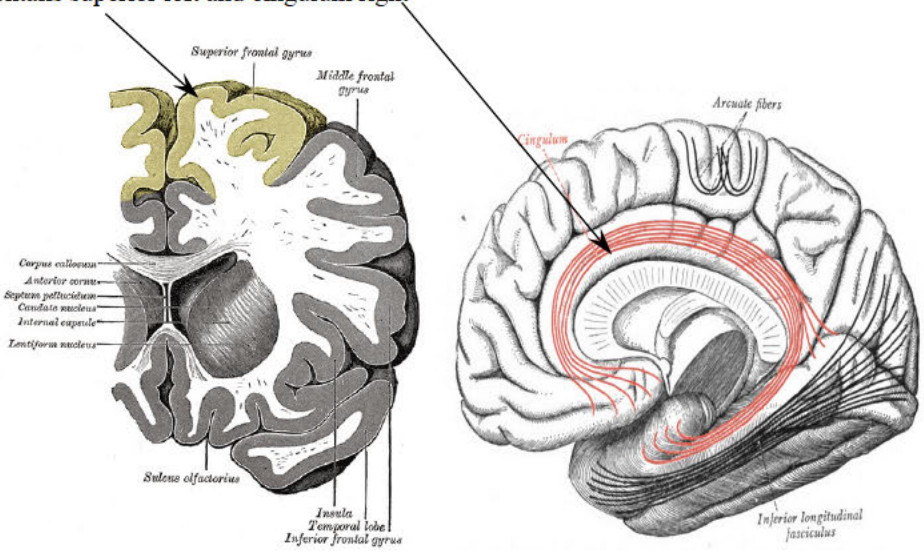


By Images are generated by Life Science Databases(LSDB). https://commons.wikimedia.org/w/index.php?curid=7768684

Medulla oblongata: Marginal lymphocytic perivascular infiltrates.



D) Gyrus frontalis superior left and cingulum right

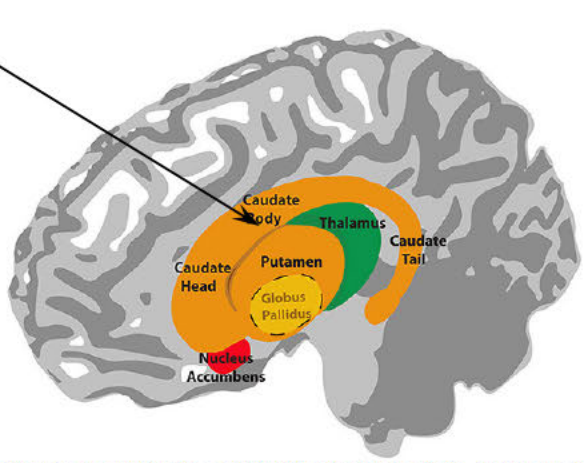


- Subarachnoid blood vessels with clumped erythrocytes (thrombus?).
- Increased cell accumulation on inside walls
- Focal lymphocytic endothelial swellings ++. EVG:
- Provides no new information

- CD61: Positive labeling in the endothelial area, as well as positive deposits around the vessels. Partly probably in inflammatory cells.

E) Cingulum right Perivascular lymphocytosis intracerebral (not subarachnoid)

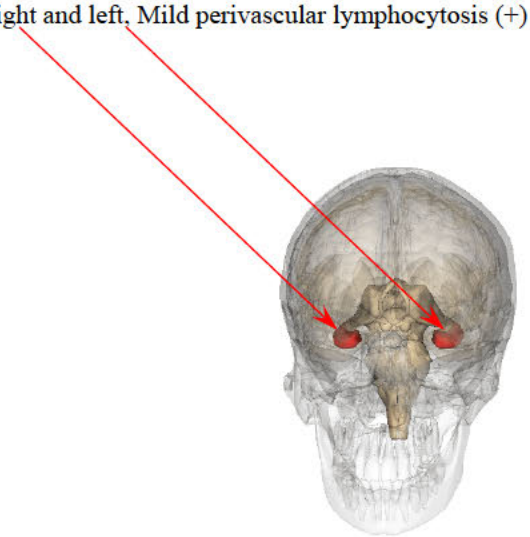
F) Right basal ganglia



https://commons.wikimedia.org/wiki/File:Anatomy_of_the_basal_ganglia.jpg

- Perivascular lymphocytosis
- EVG: Small vessel with perivascular infiltration shows no destruction of the elastic lamina

G) Hippocampus right and left, Mild perivascular lymphocytosis (+)



18.5 Interpretation by Burkhardt and Lang

Subarachnoid hemorrhage is the obvious immediate cause of death; however, it is difficult to deduce their genesis causally. A pathohistologic examination by a specialized neuropathologist who searches for potential Corona "vaccination" in the brain would be desirable.

Signs of thrombus formation were found in brain tissue at various sites, as well as traces of the subarachnoid hemorrhage that took place.

In the area of the cerebral vascular perivascular lymphocytic inflammation, sometimes with endothelial swelling vessels were found in various organs.

Signs were found in the heart muscle focal, mild myocarditis and pronounced lymphocytic endotheliitis was found in myocardial vessels, partly with destruction of the vascular wall.

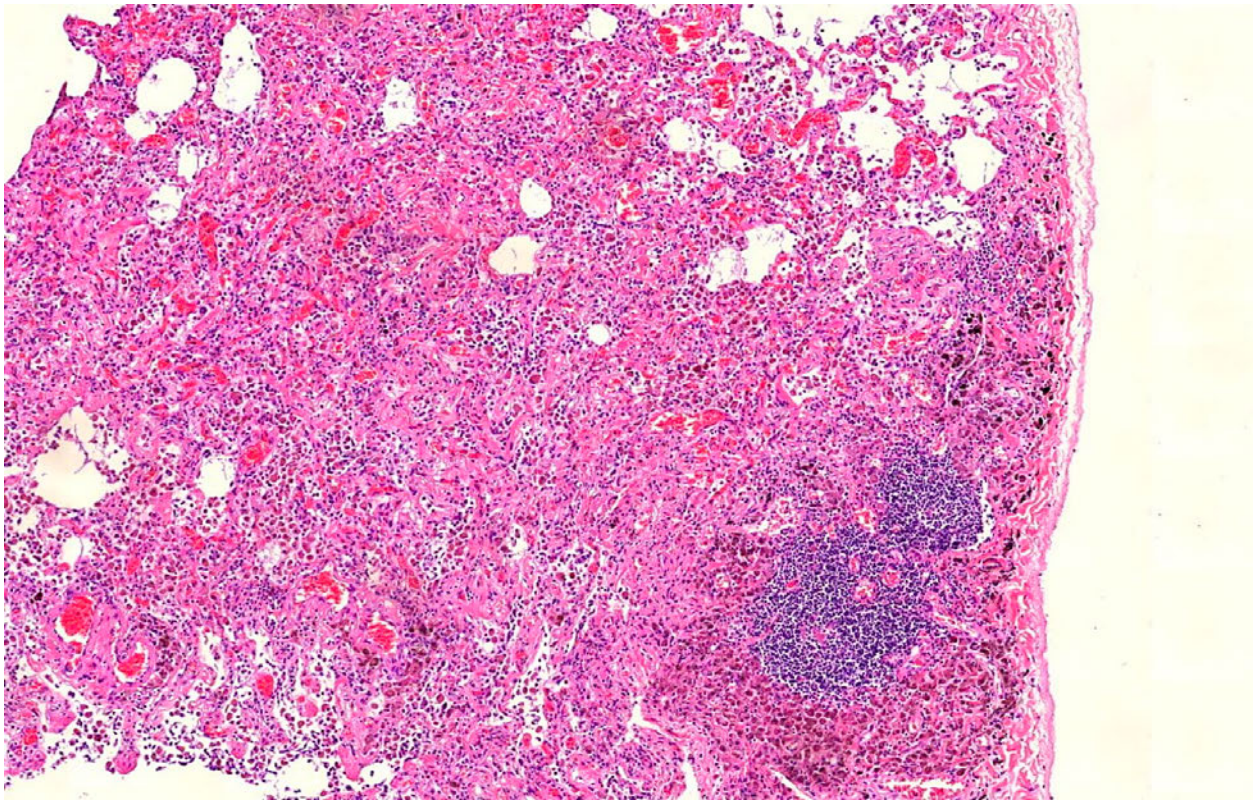
Macrophage-rich alveolitis and perivascular lymphocytic inflammation was found in the lung.

Lymphocytic vasculitis was also found in liver and spleen, especially of the inner walls of the vessels, where the there was onion-skin-like textural distortions of the vessels.

A secondary finding and irrelevant for the occurrence of death is the pronounced expression of Spike-S1 in the area of the testicular tubules with clear stratification disturbance of spermatogenesis.

Due to the overall findings, in particular the partially strong expression of spike protein, there is a connection between corona "vaccination" and death with almost certain probability.

18.6 Histology and Immunohistochemistry



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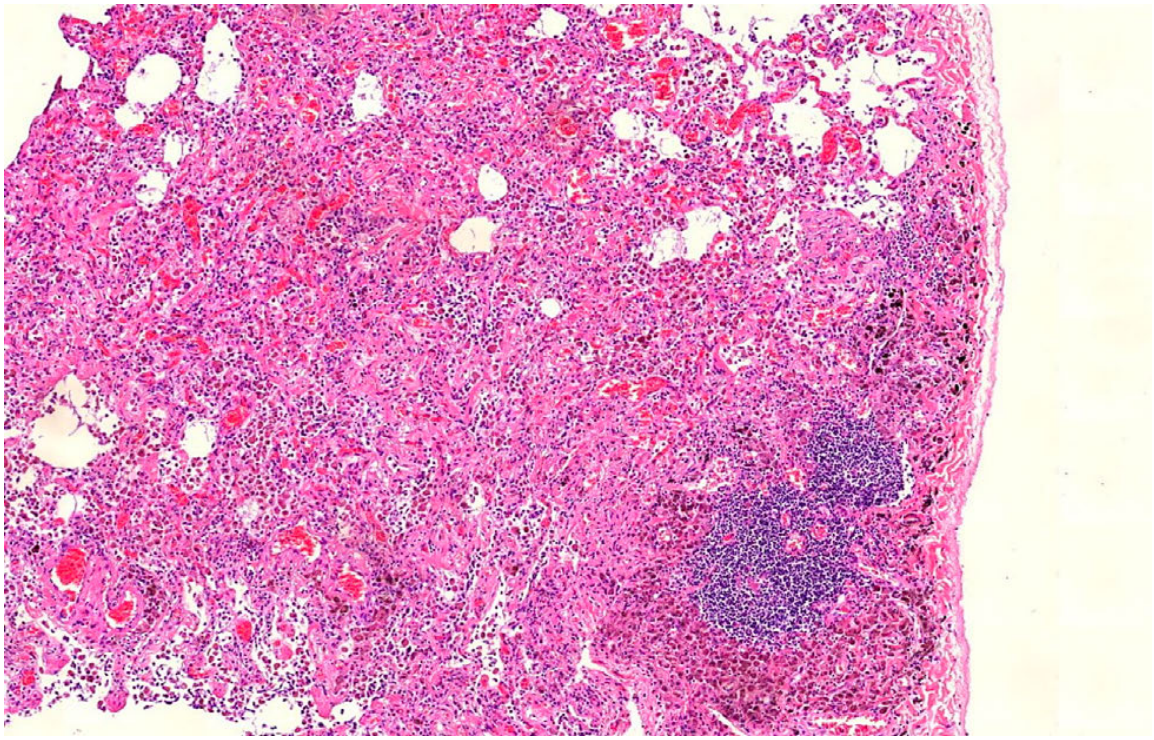

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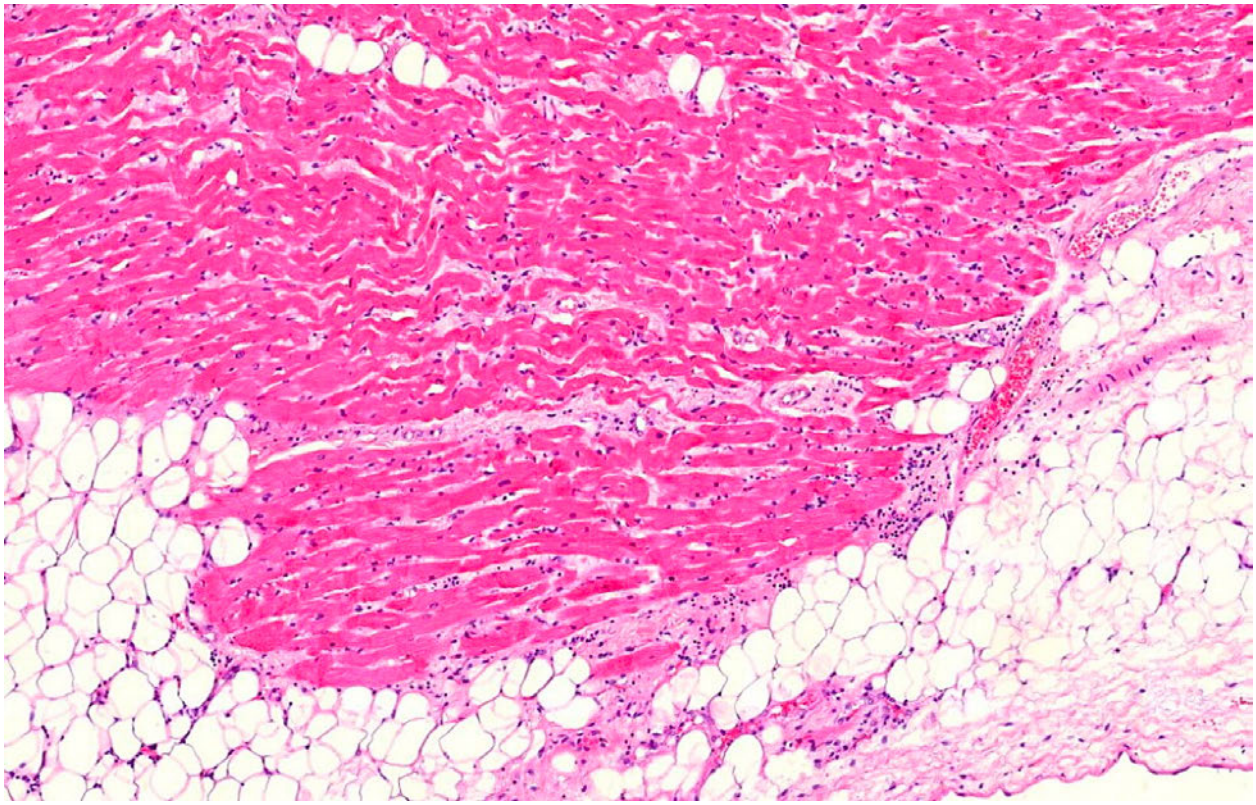

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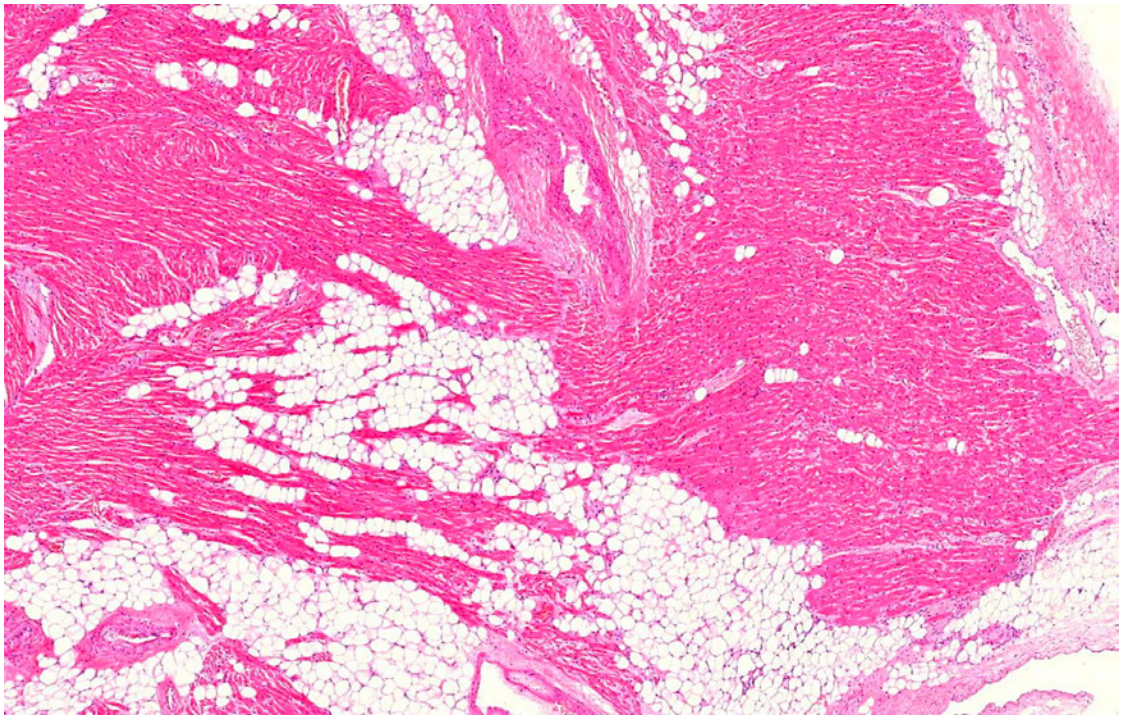

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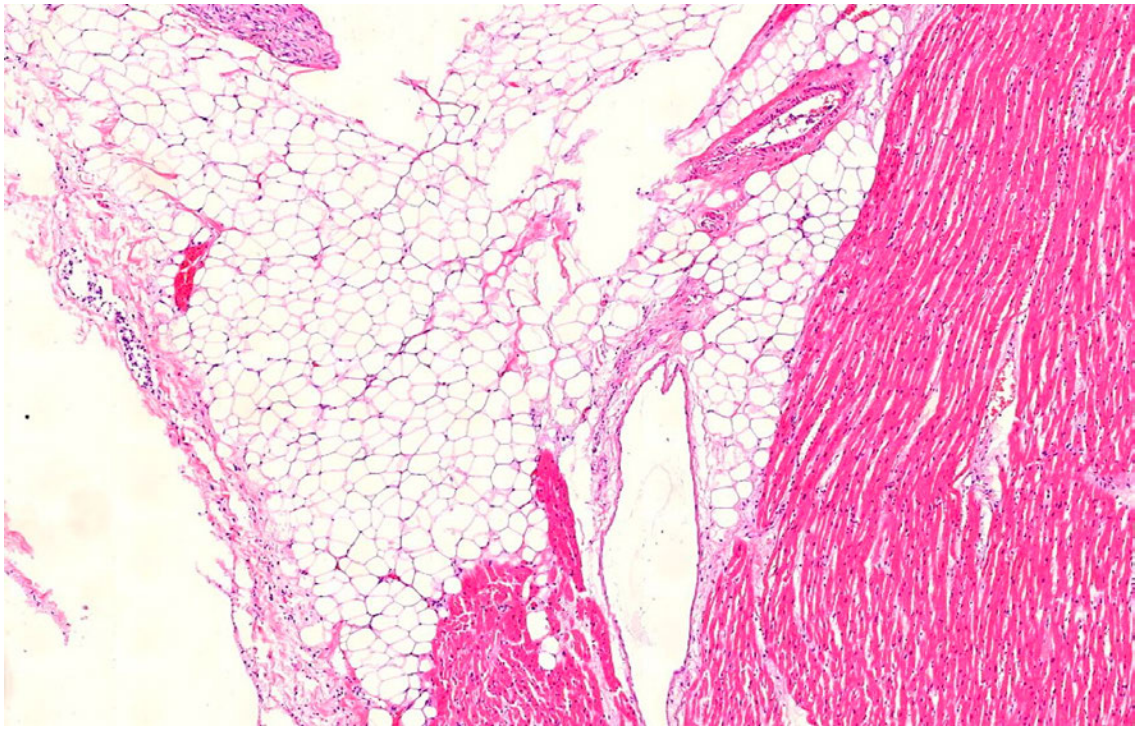

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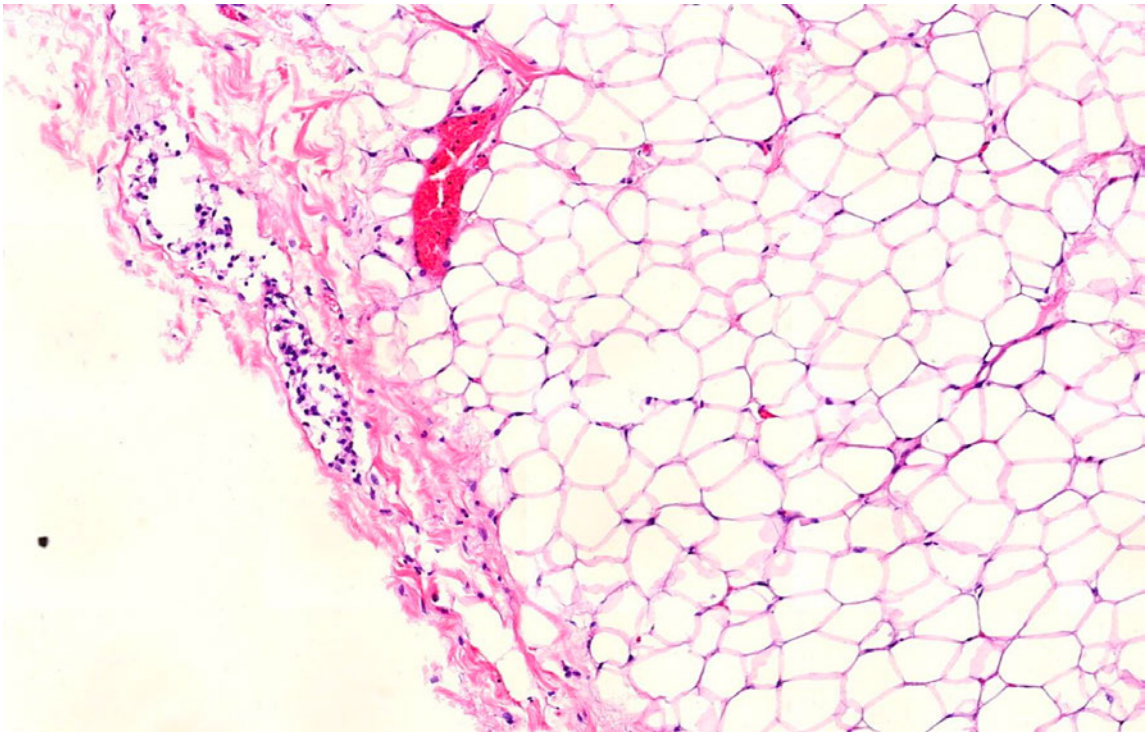

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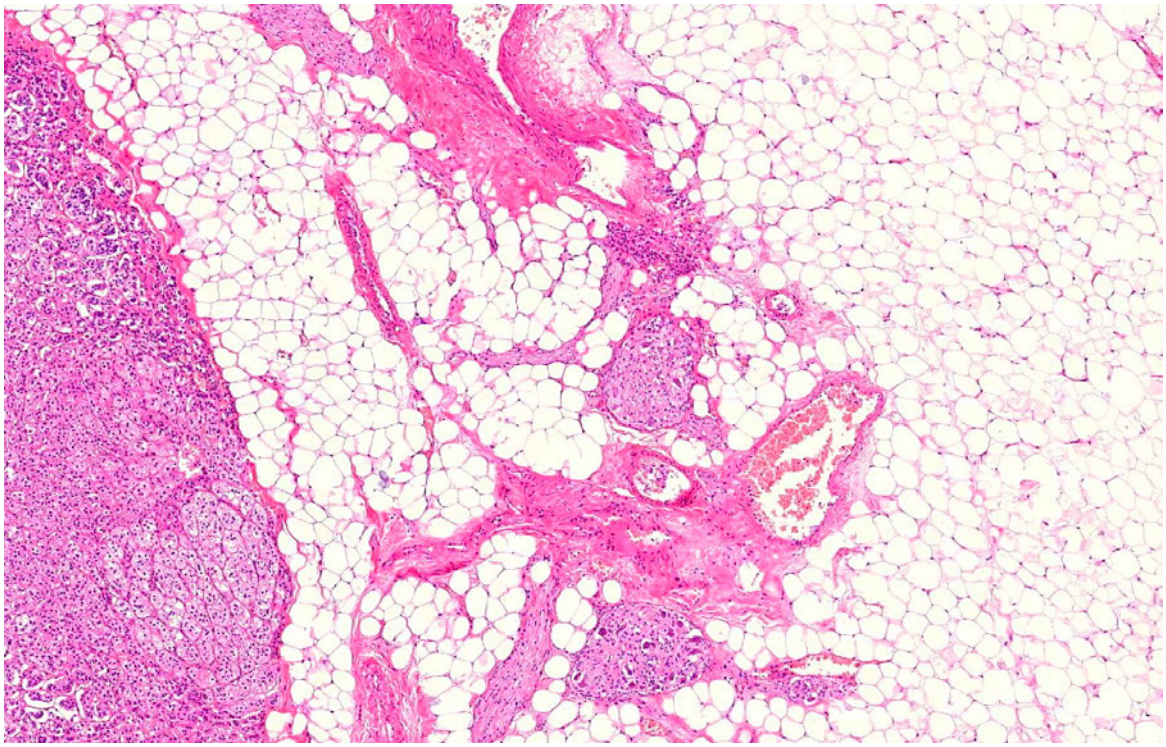

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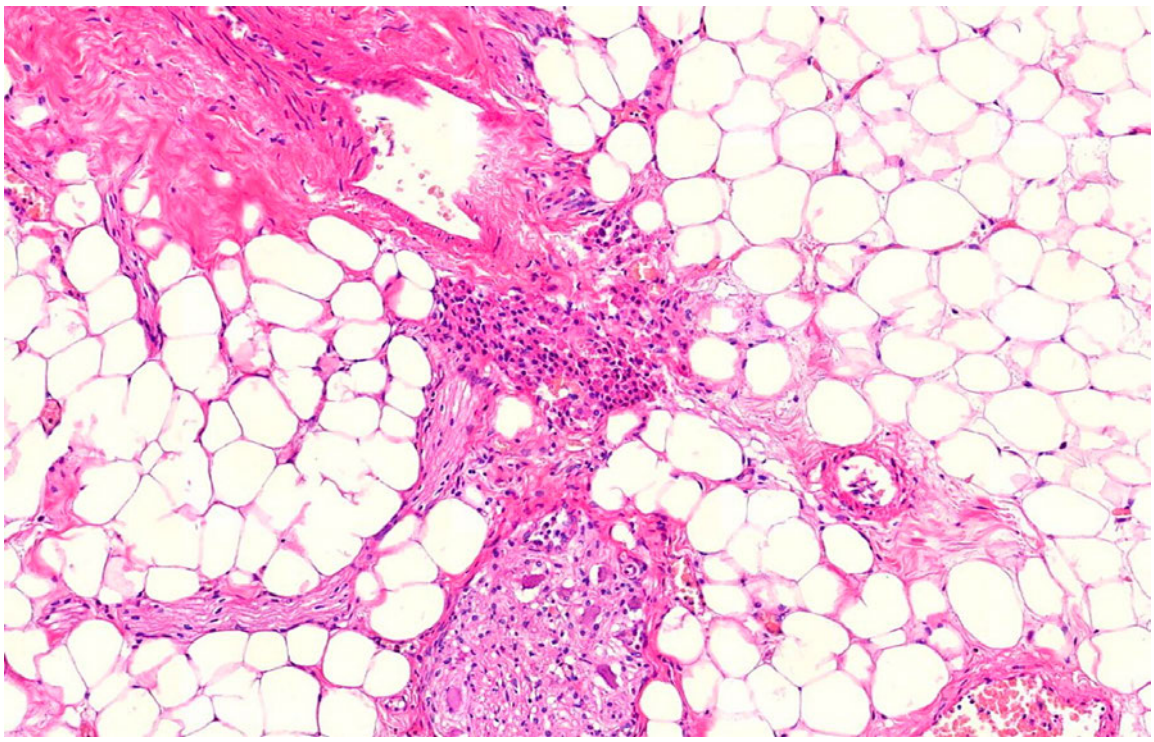

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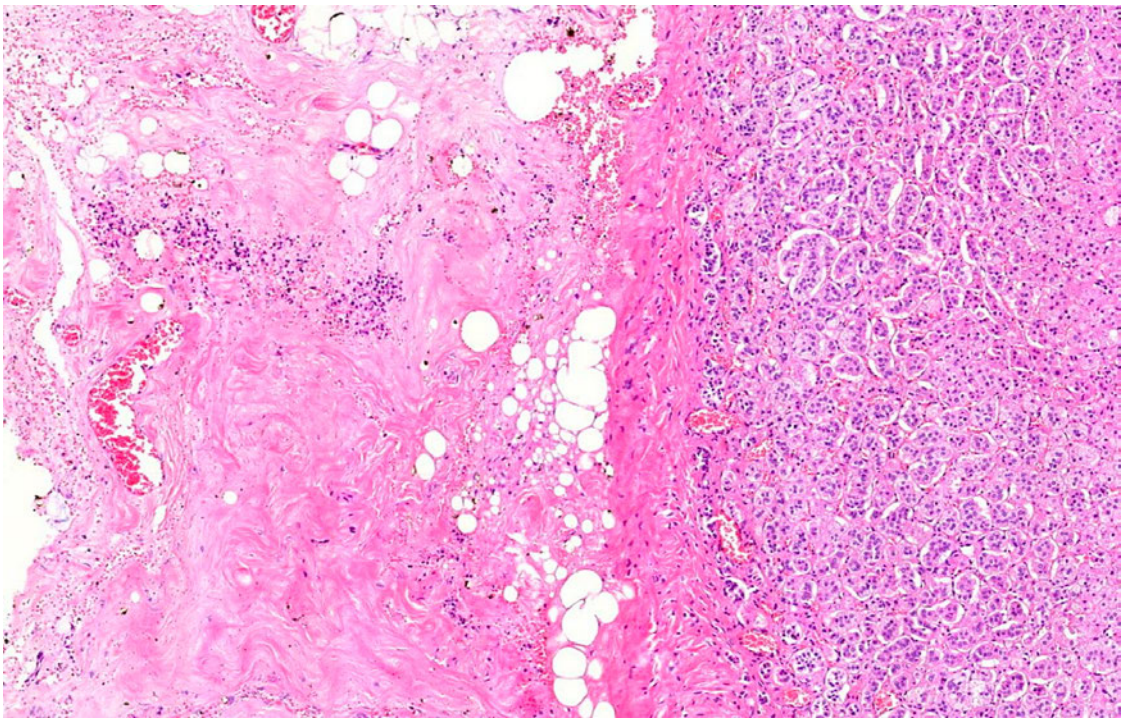

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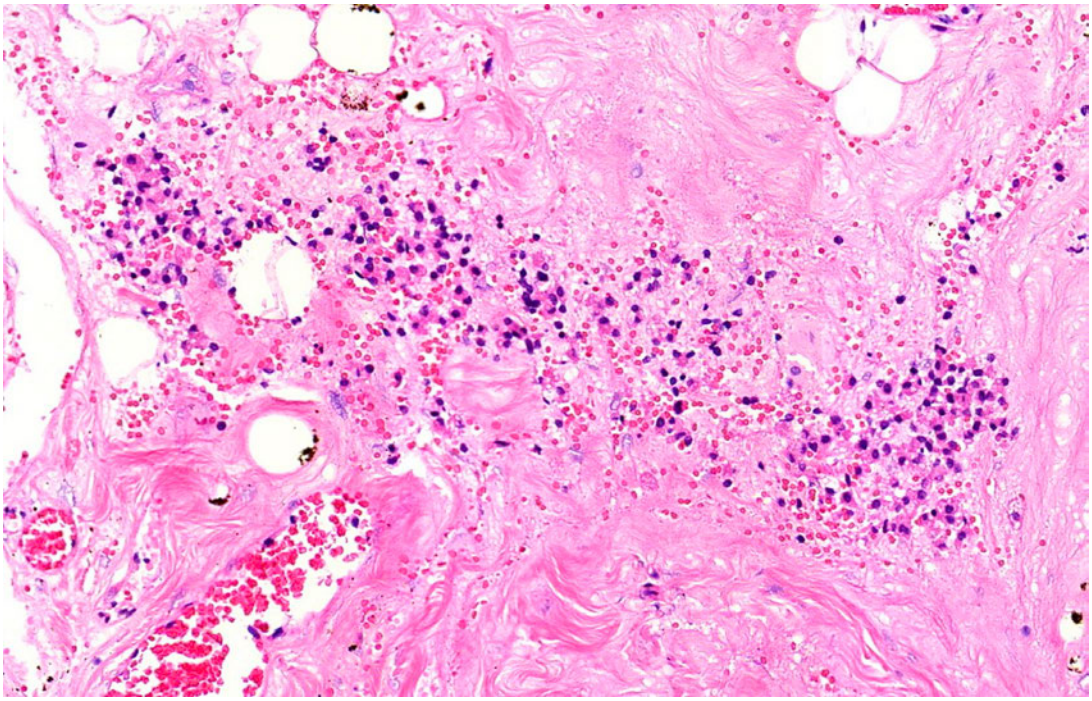

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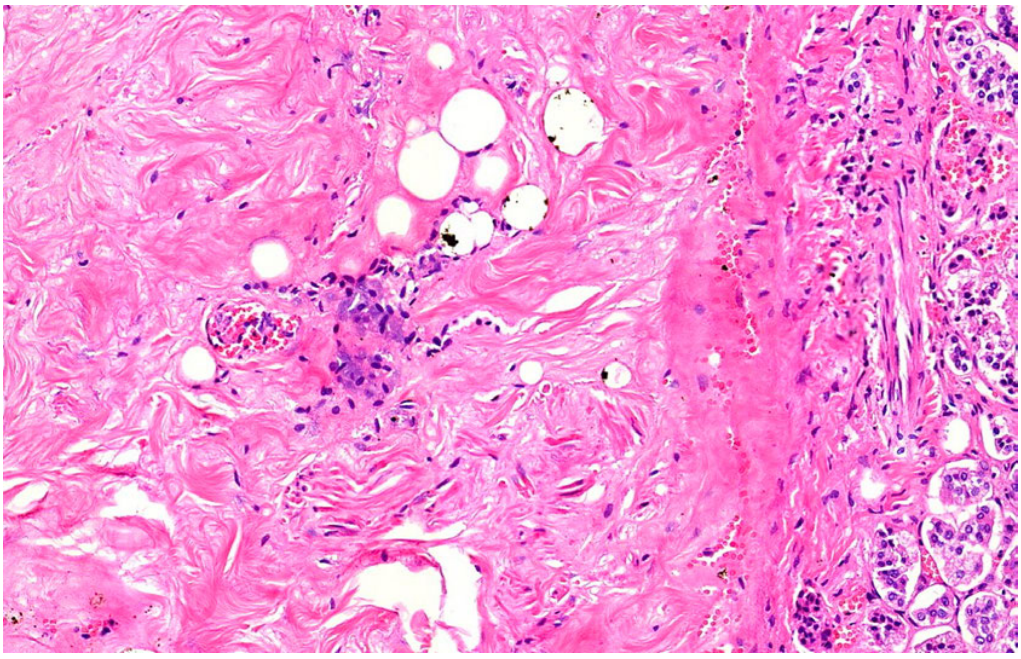

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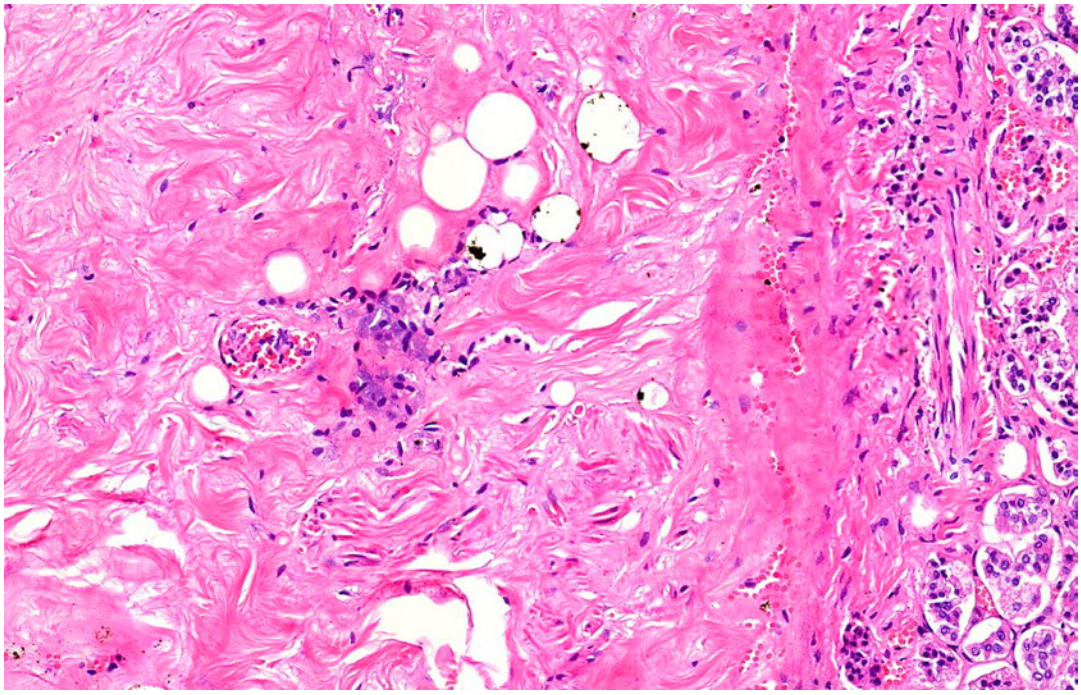

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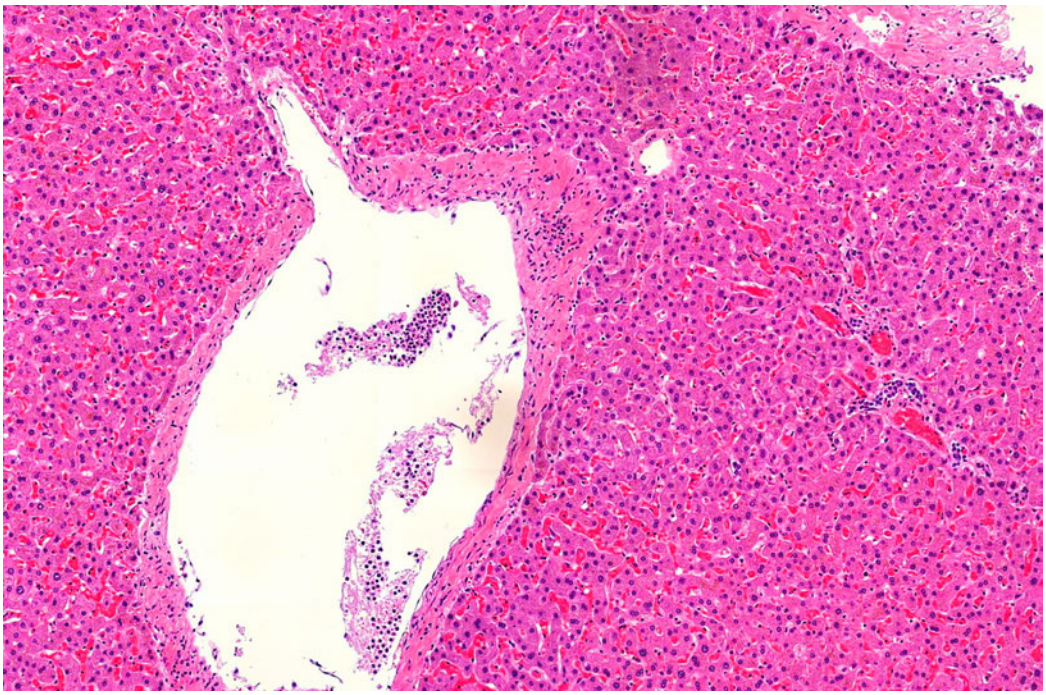

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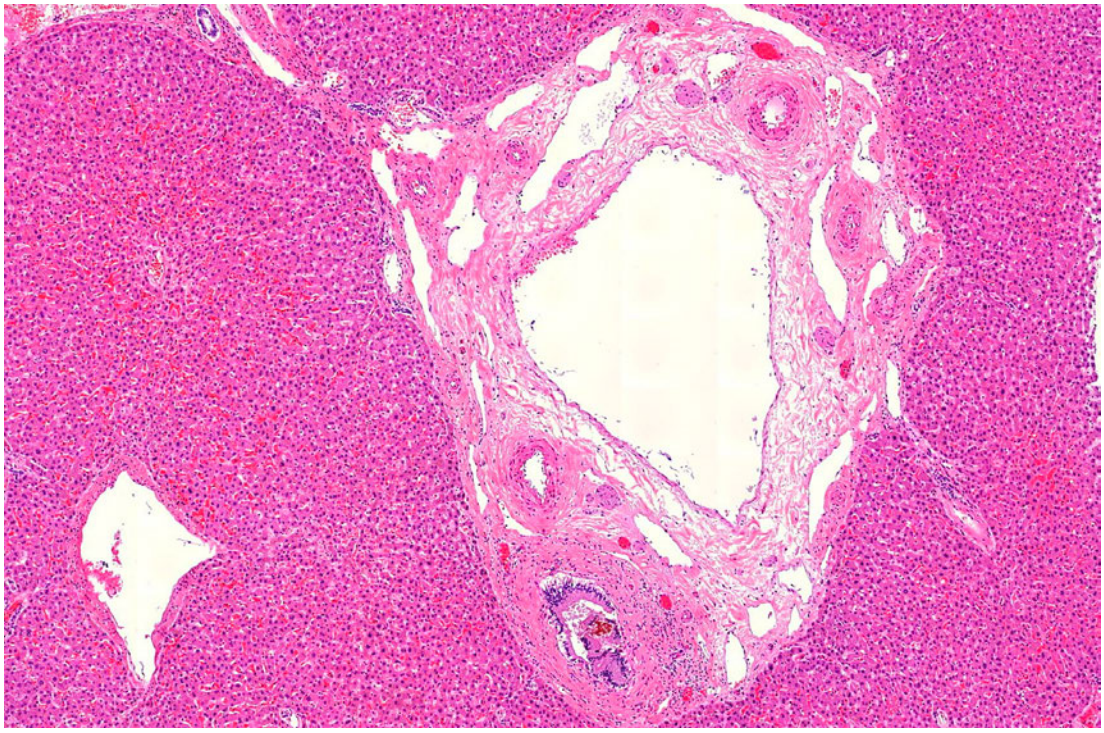

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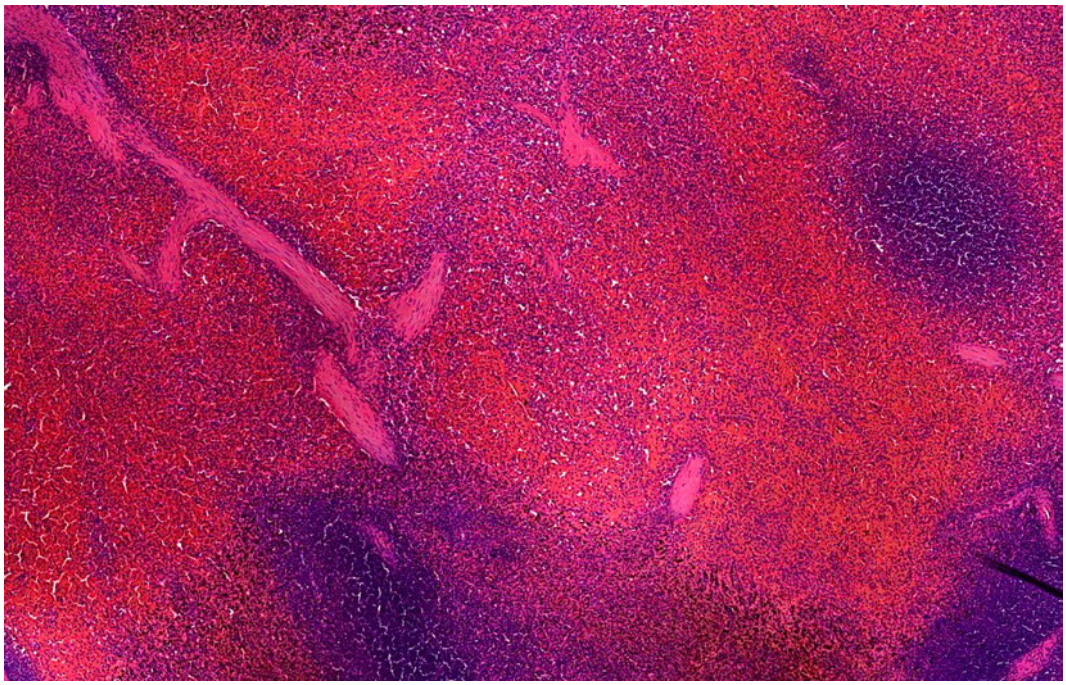

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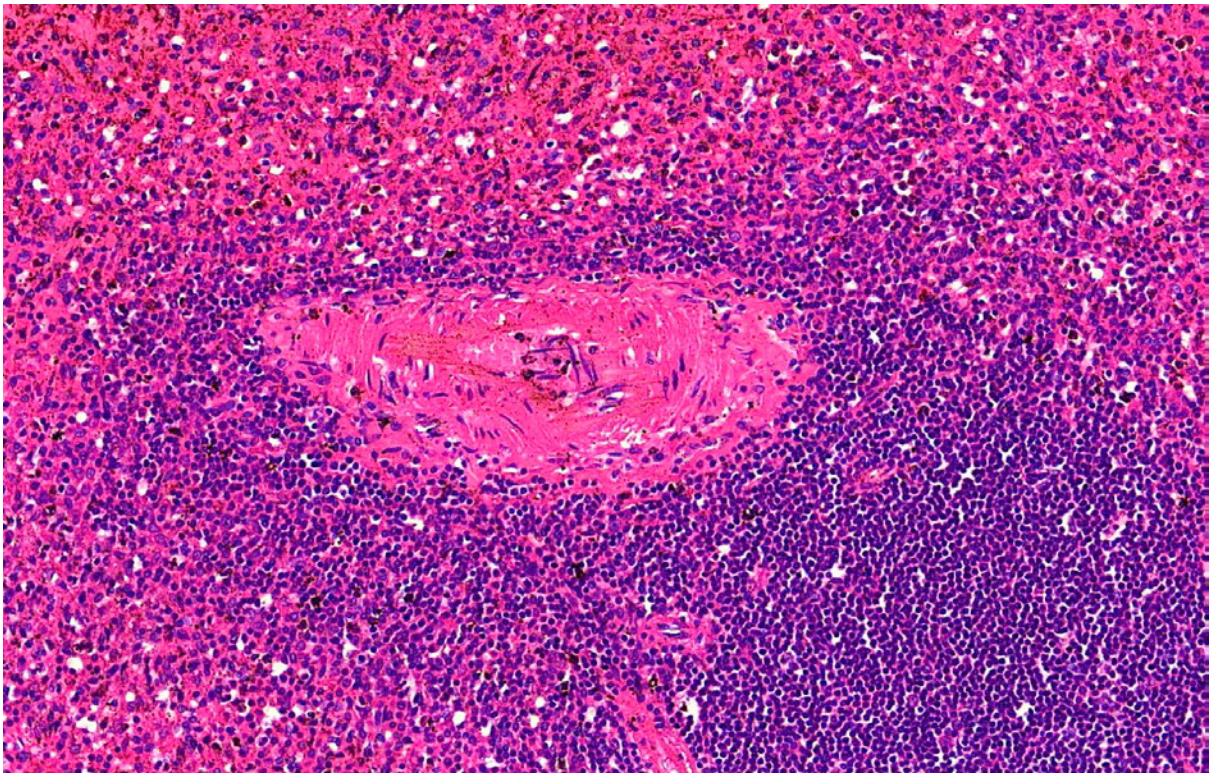

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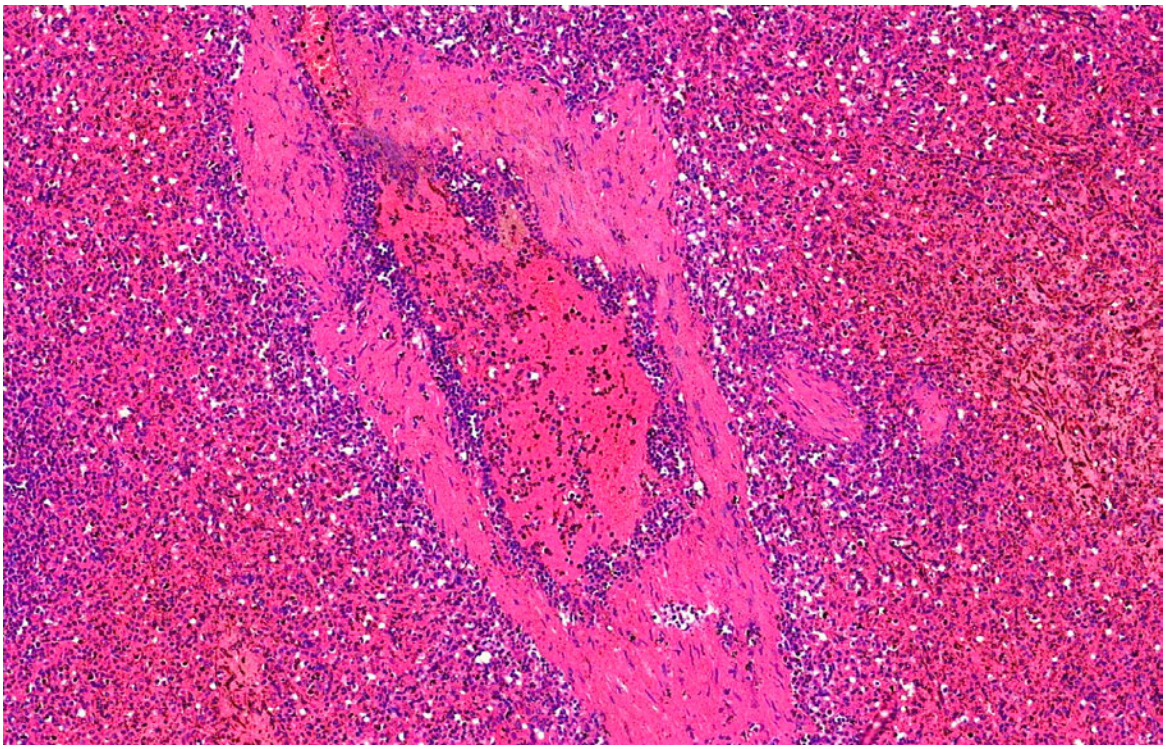

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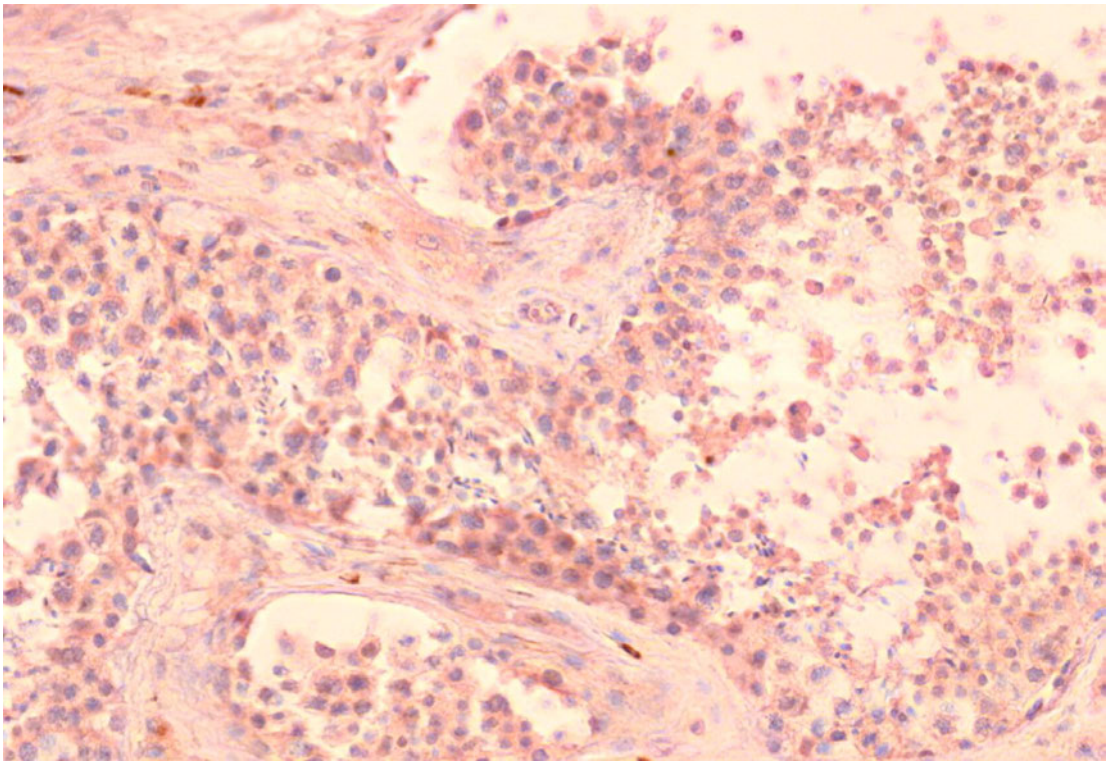

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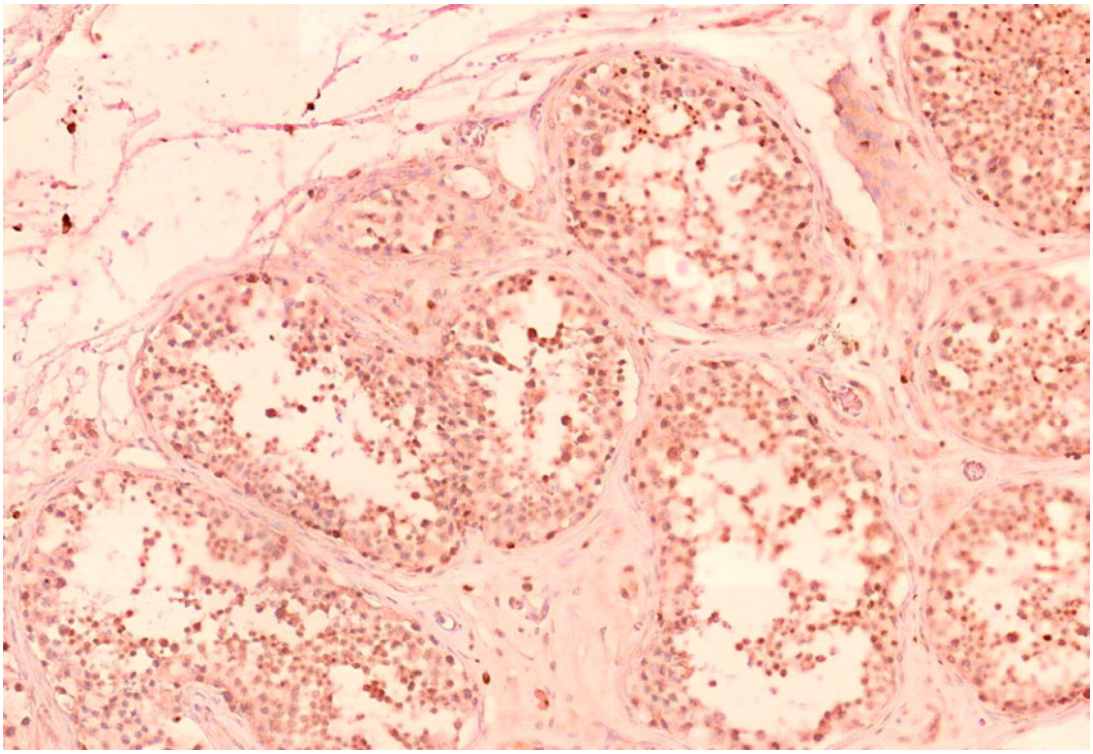

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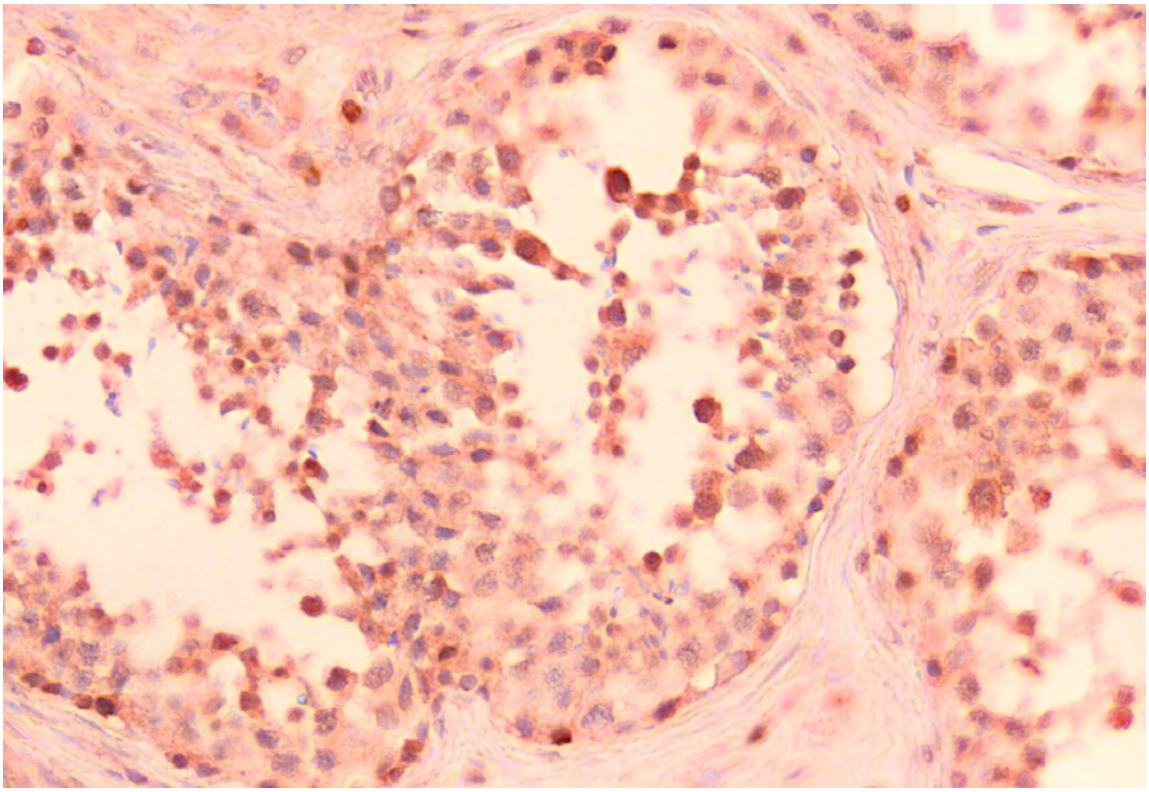

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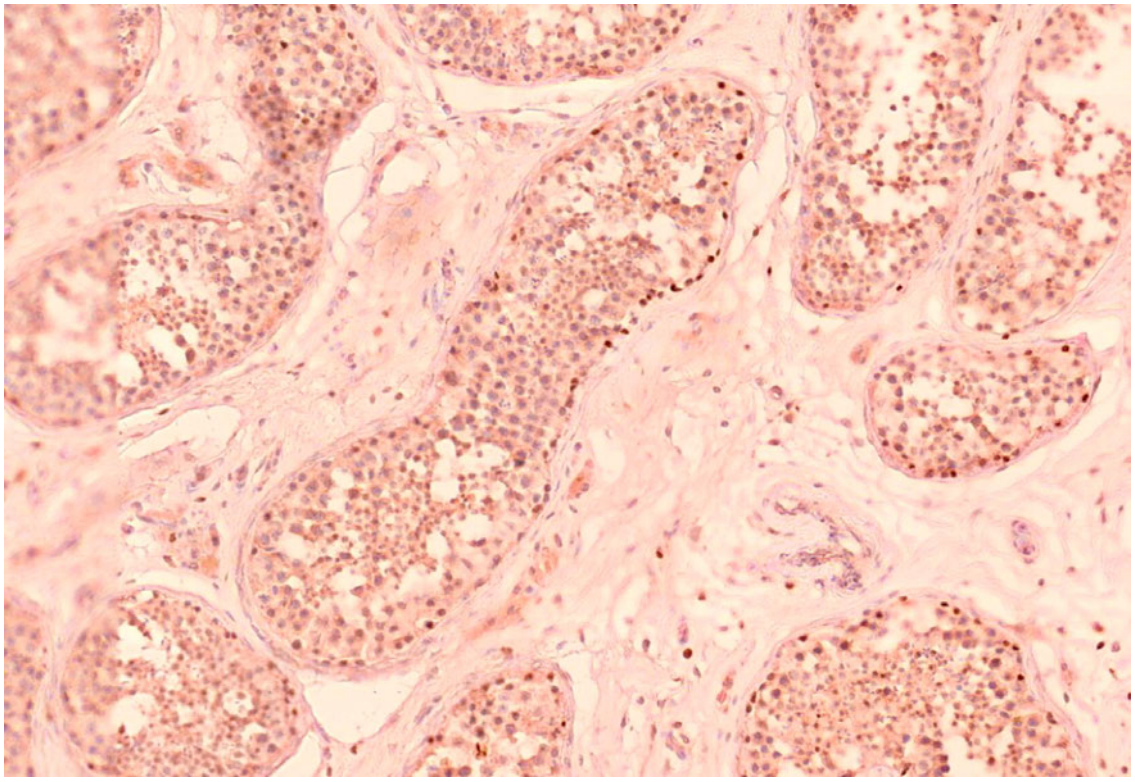

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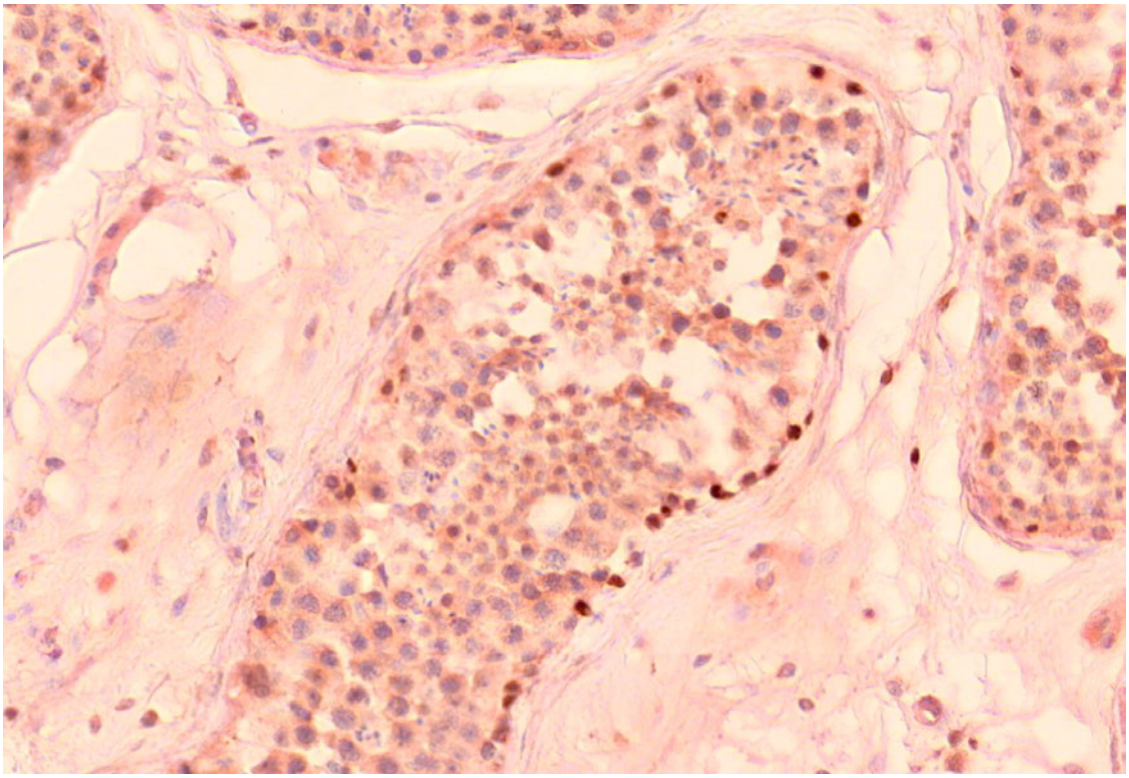

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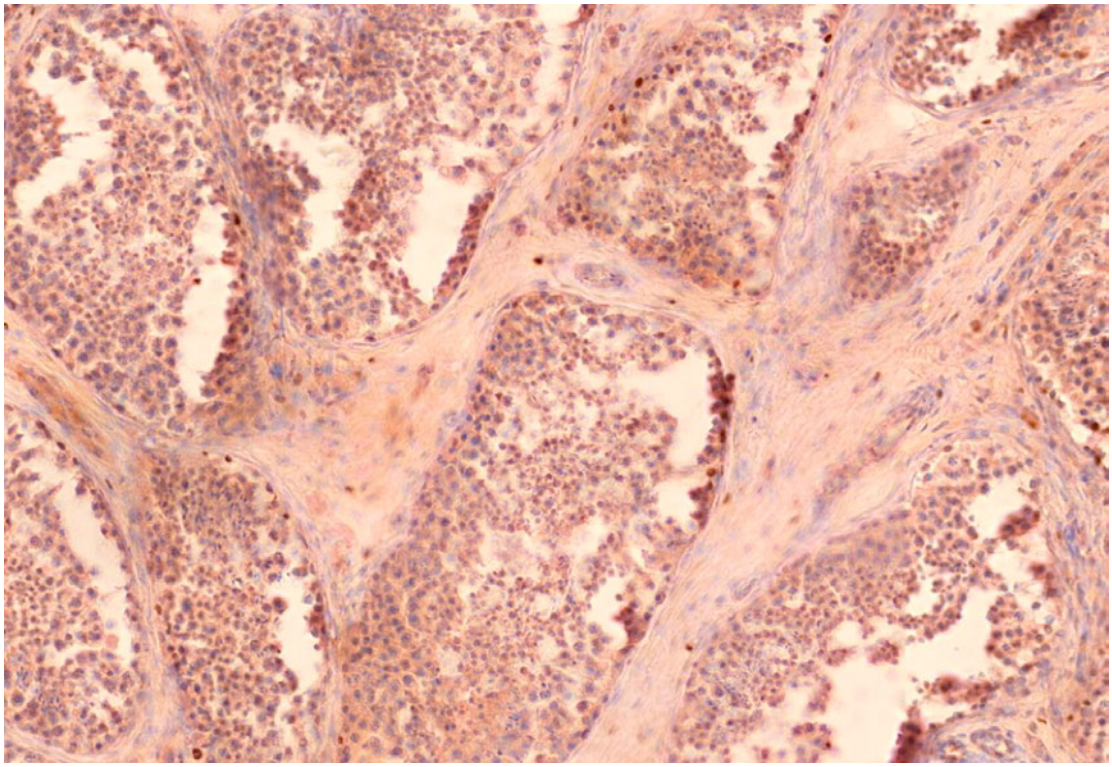

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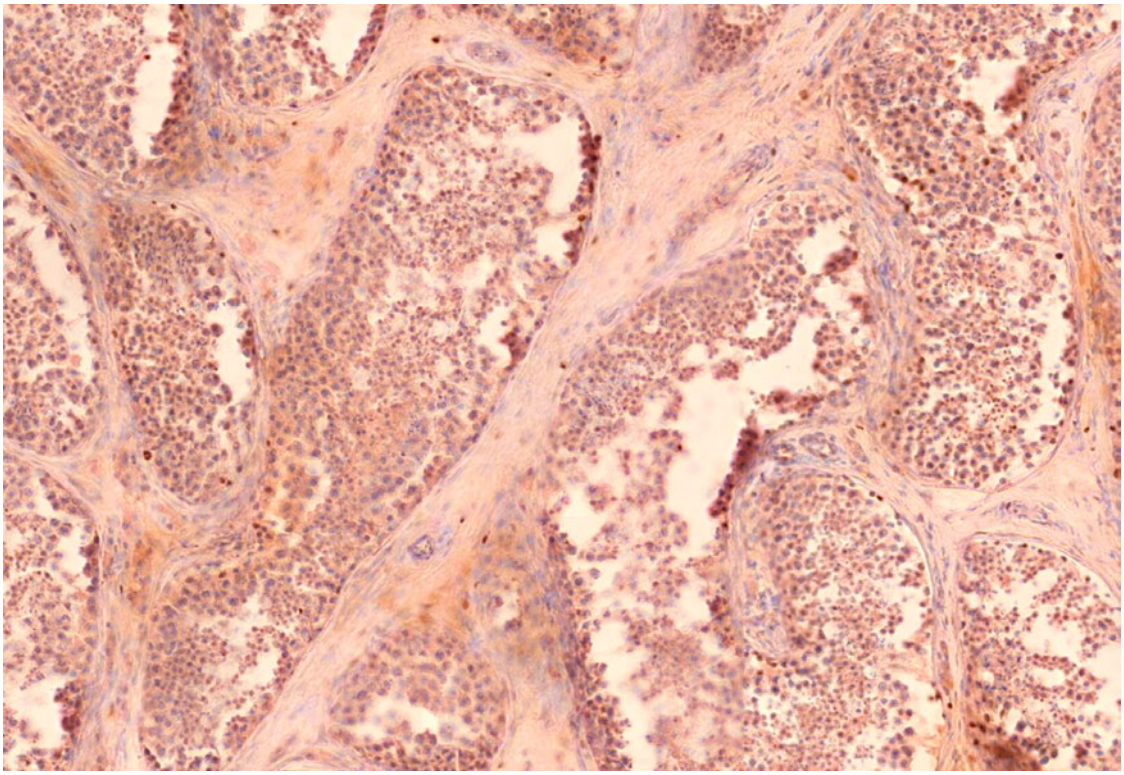

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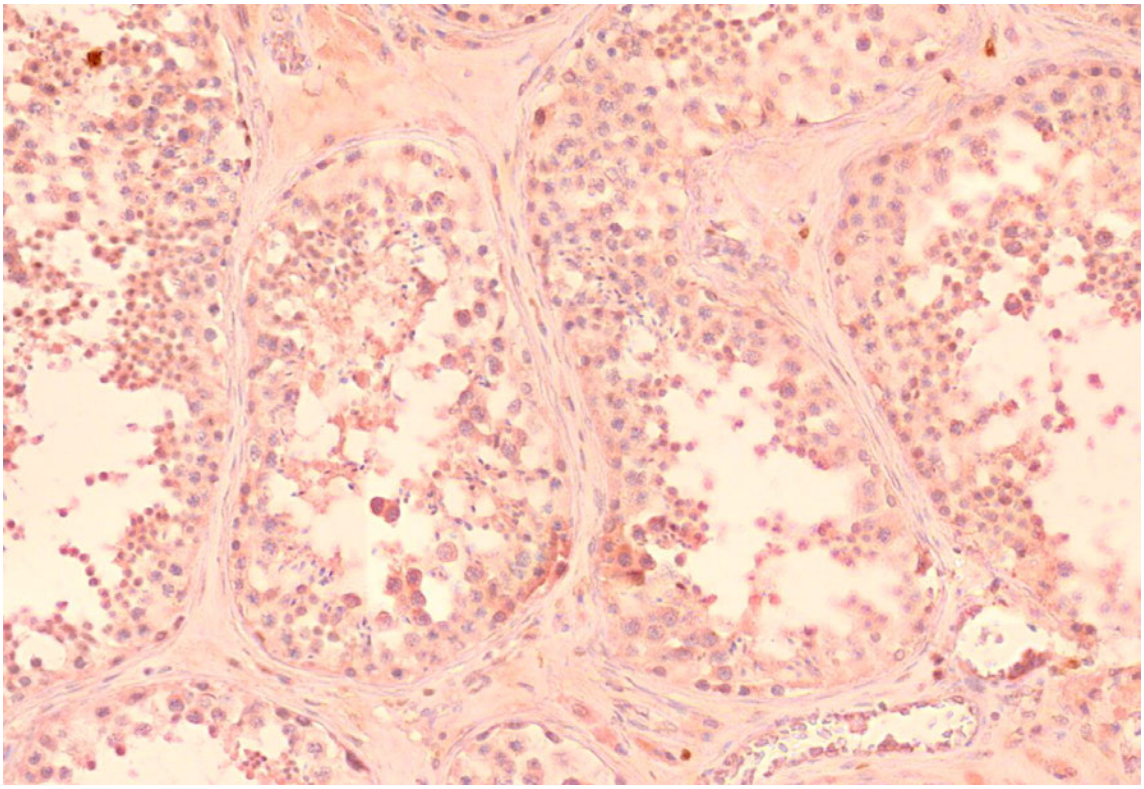

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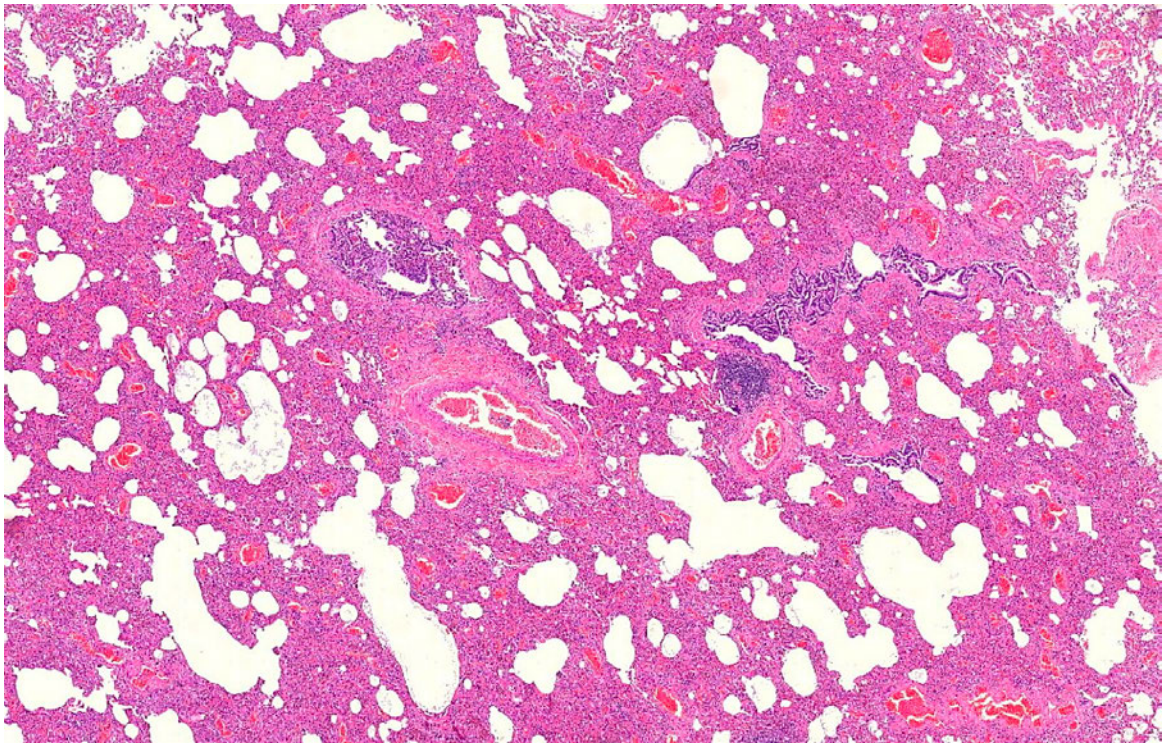

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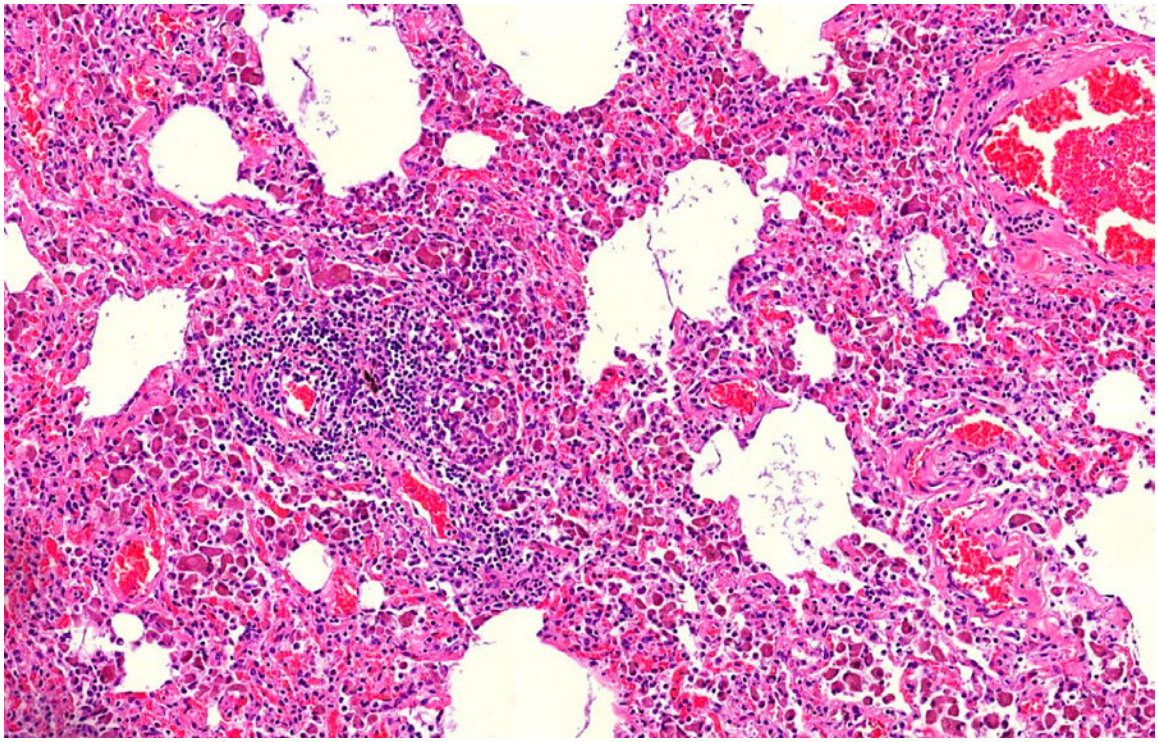

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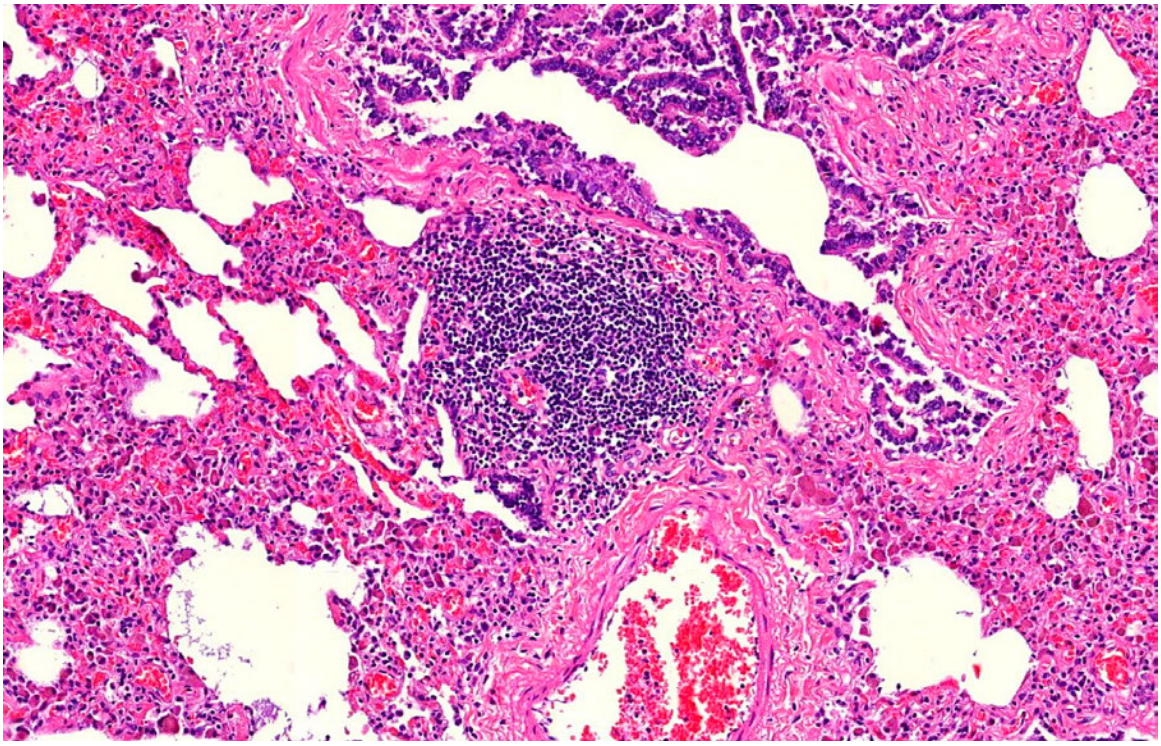

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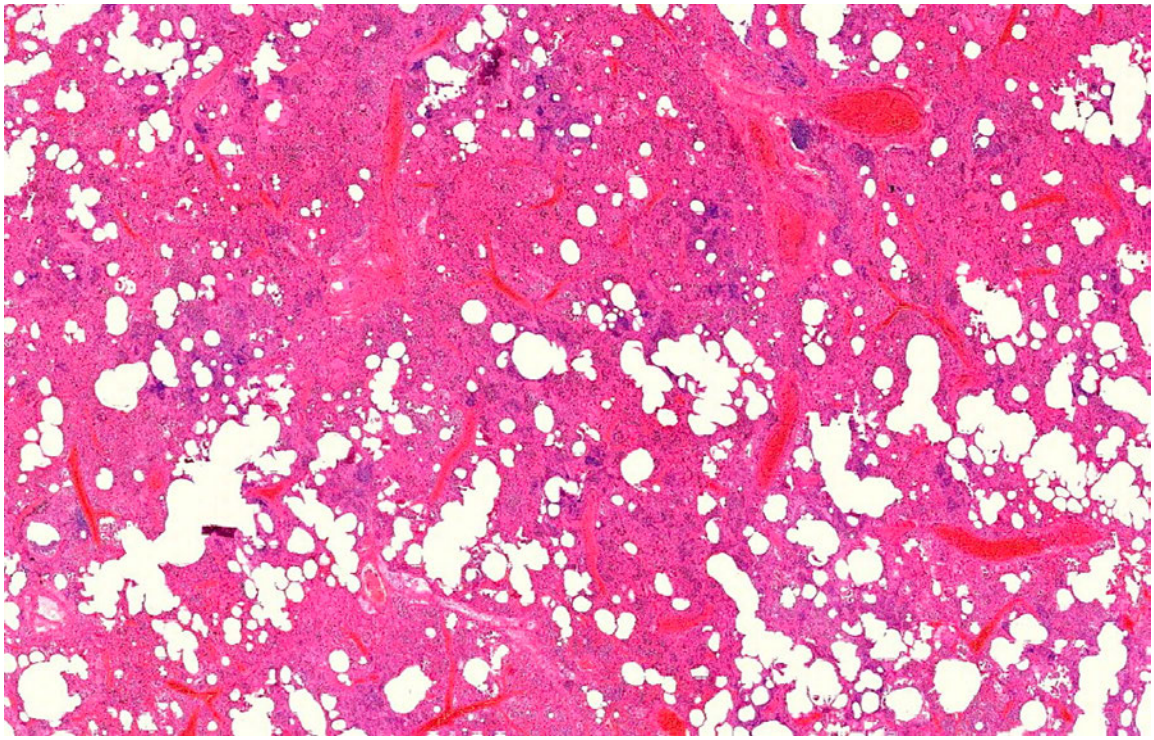

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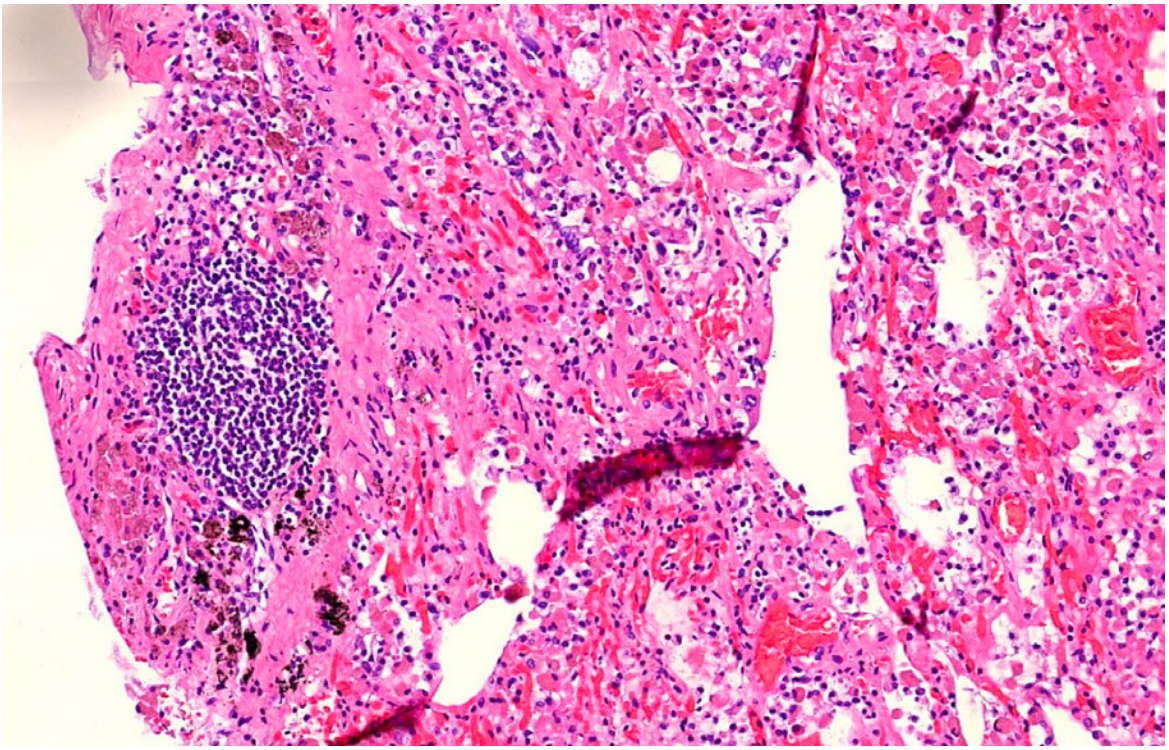

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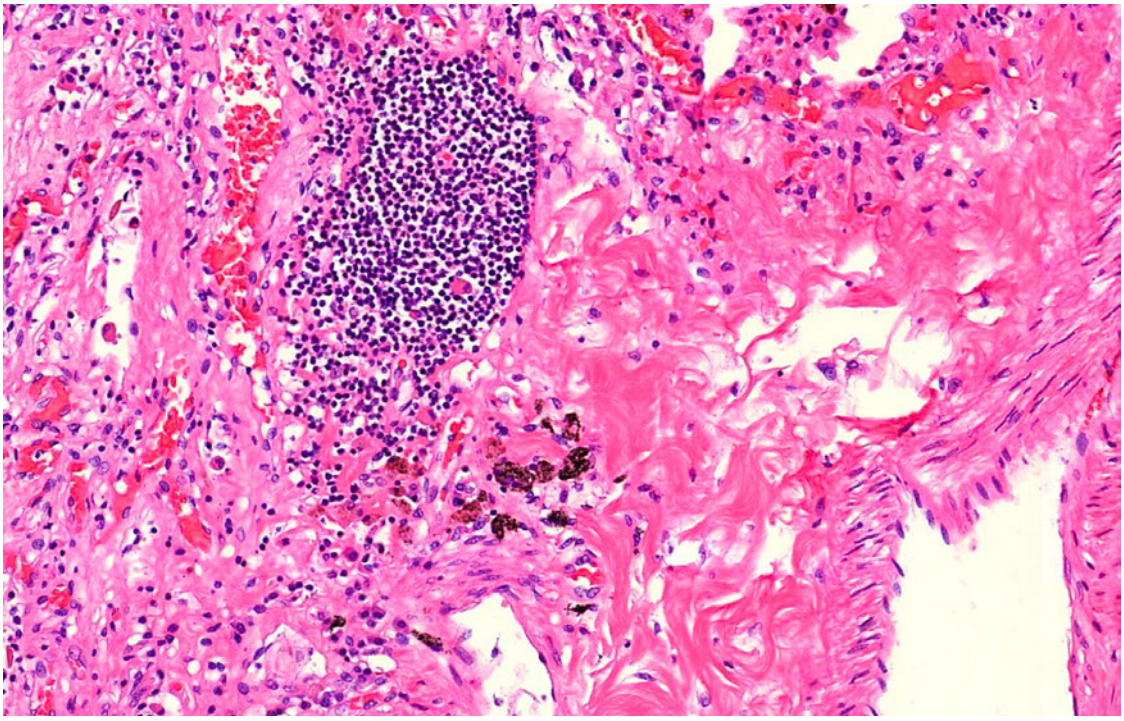

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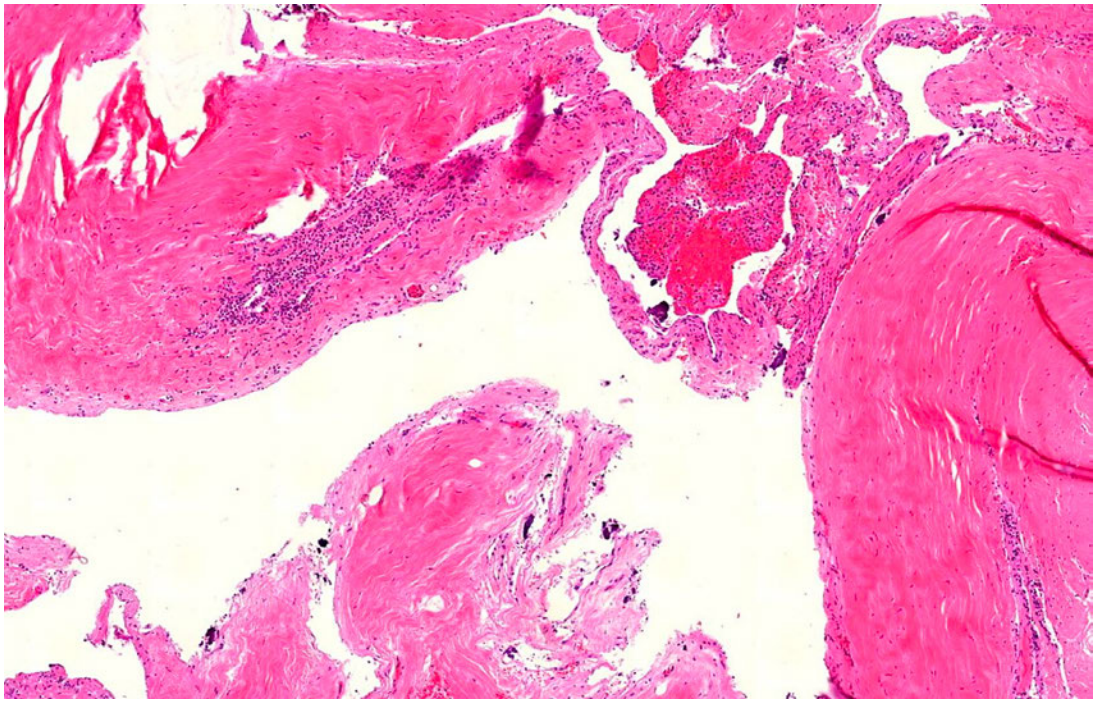

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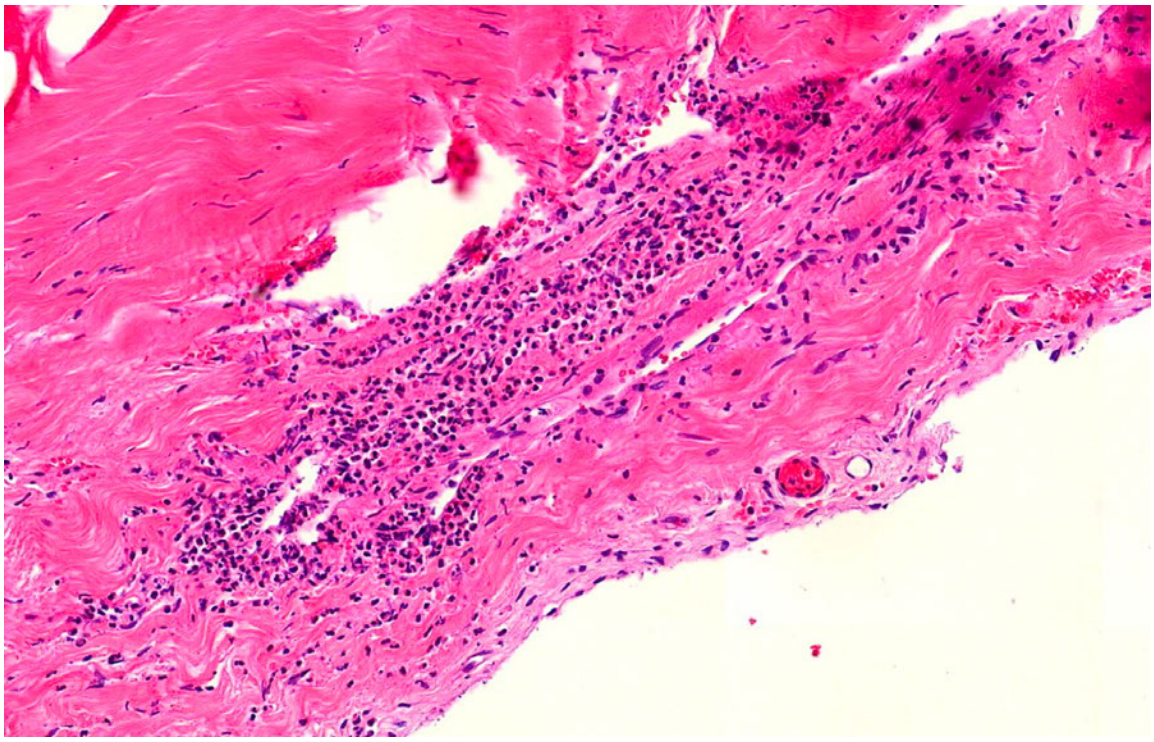

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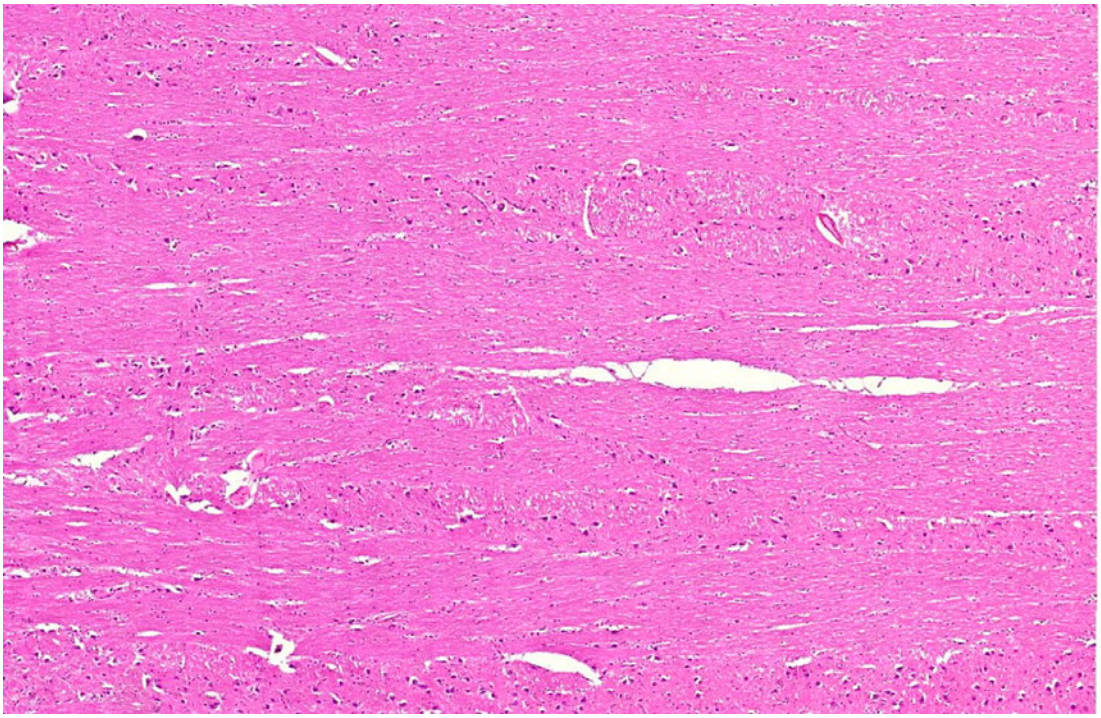

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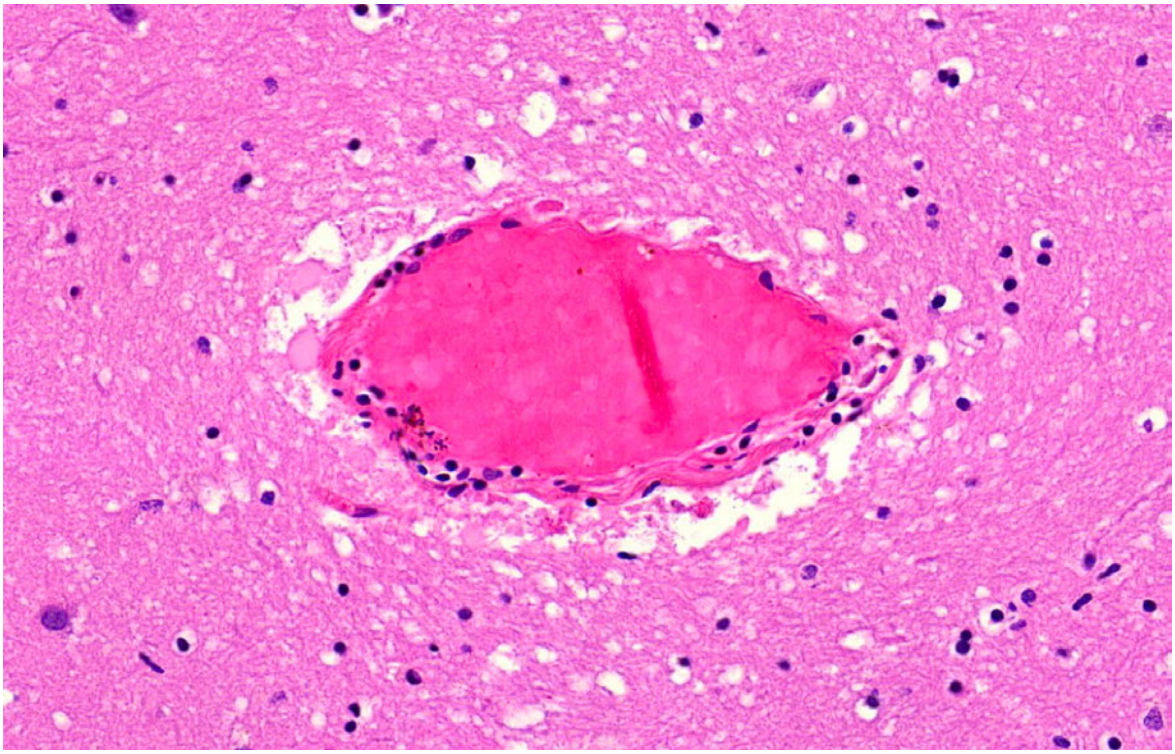

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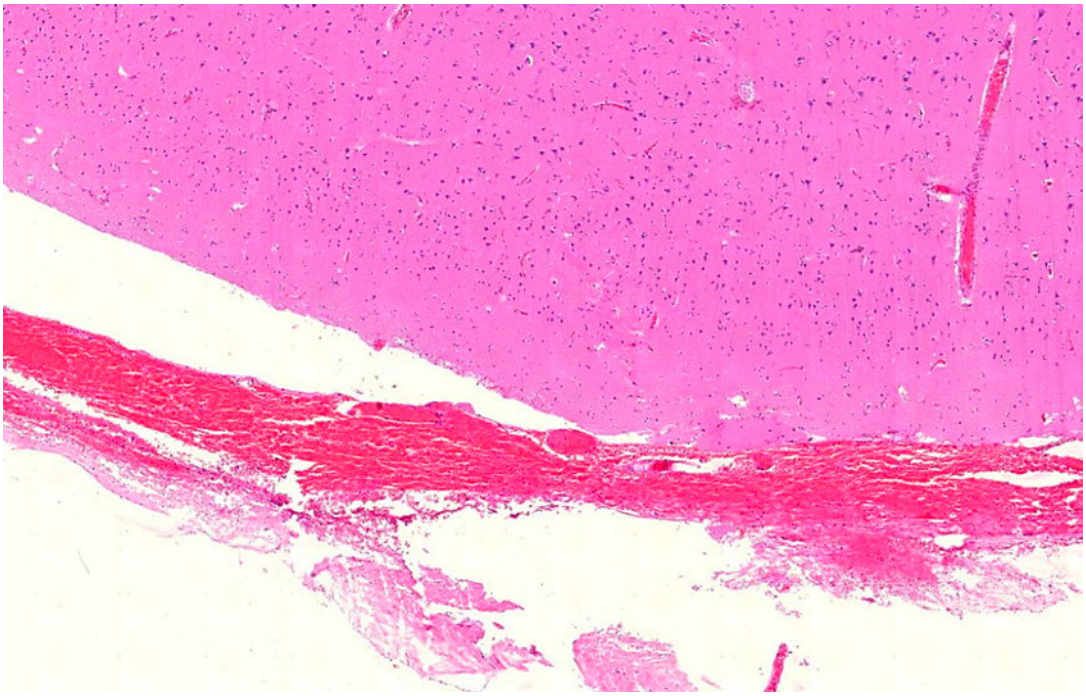

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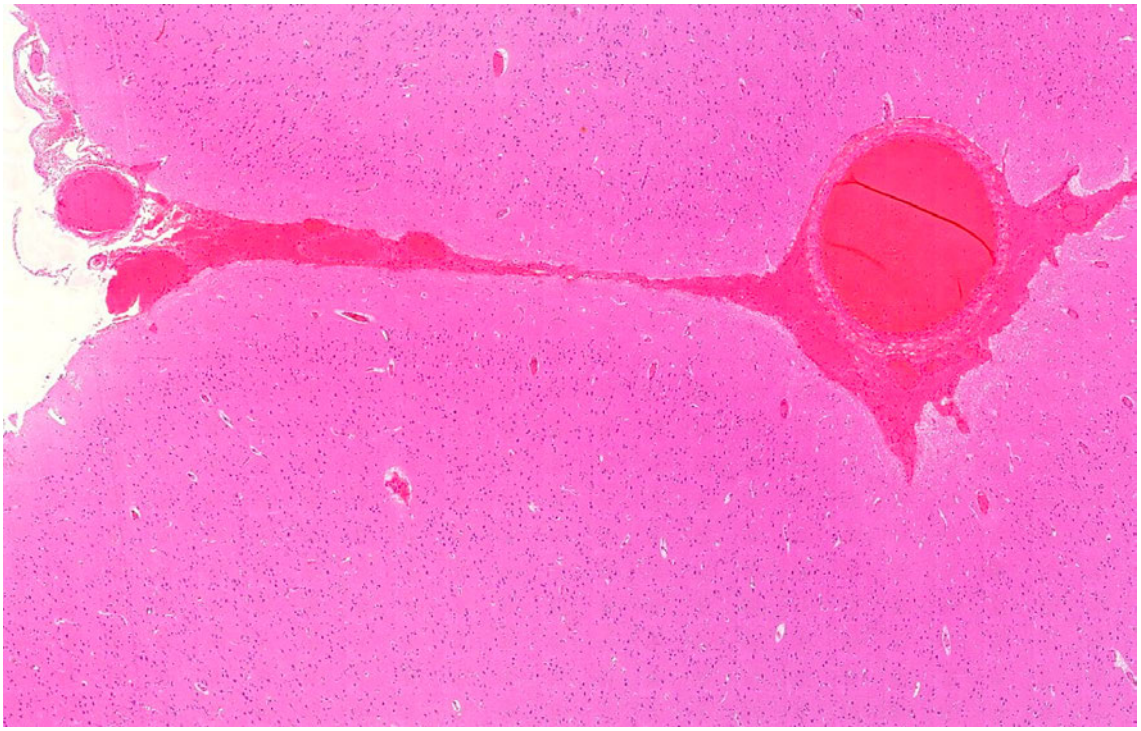

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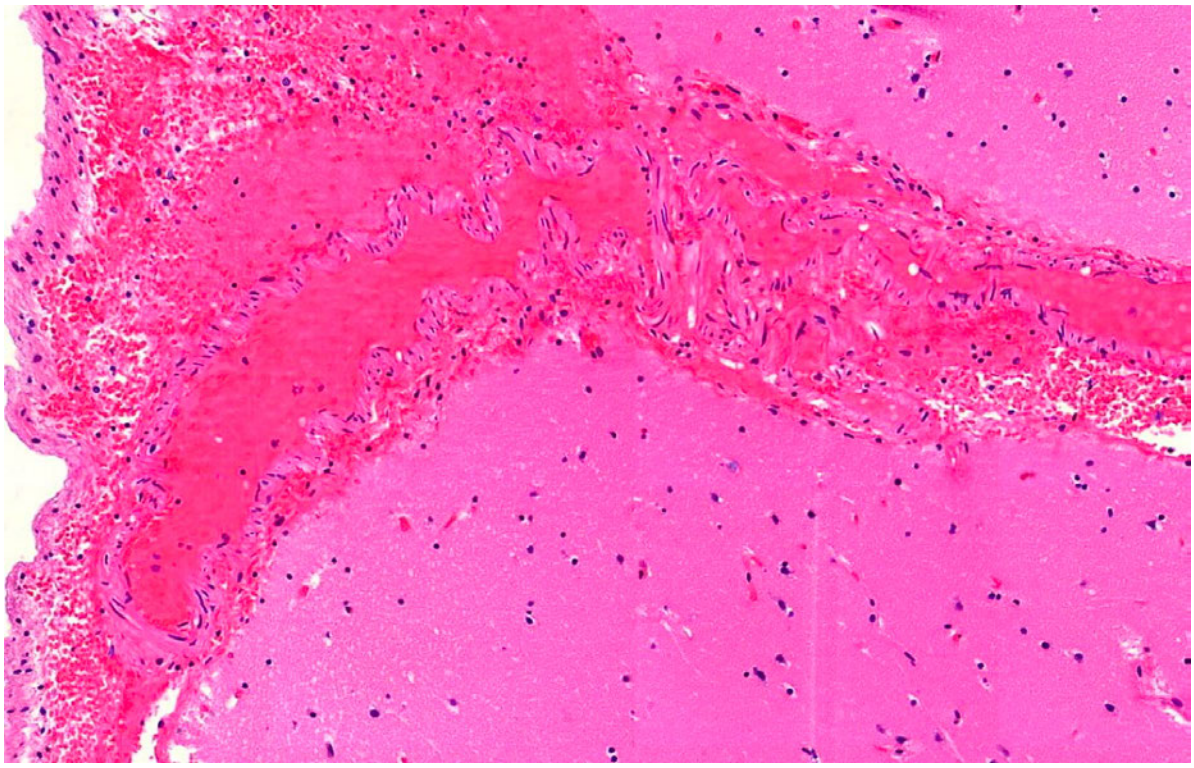
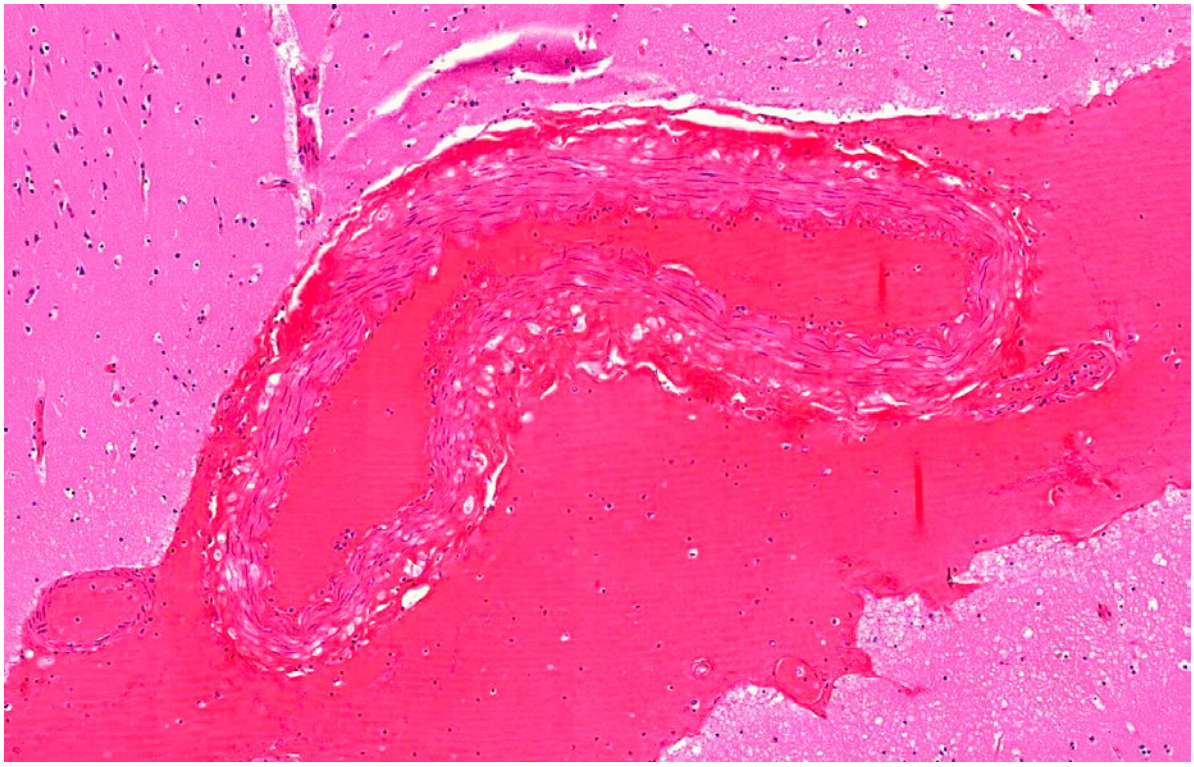


18-E-ab



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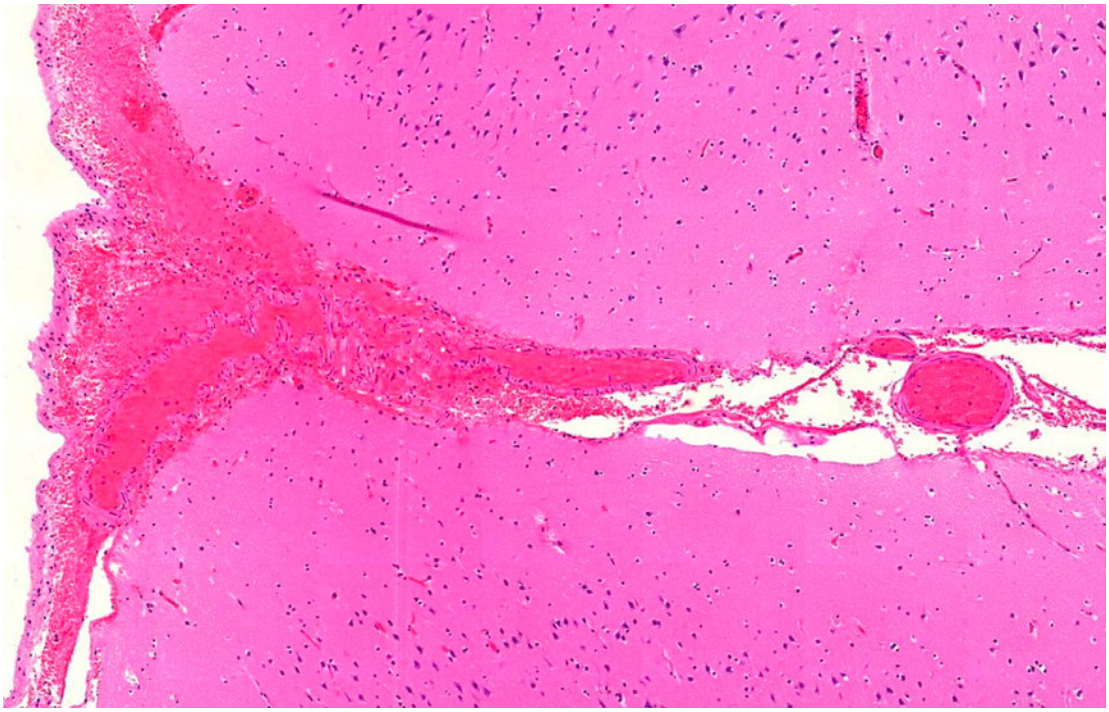

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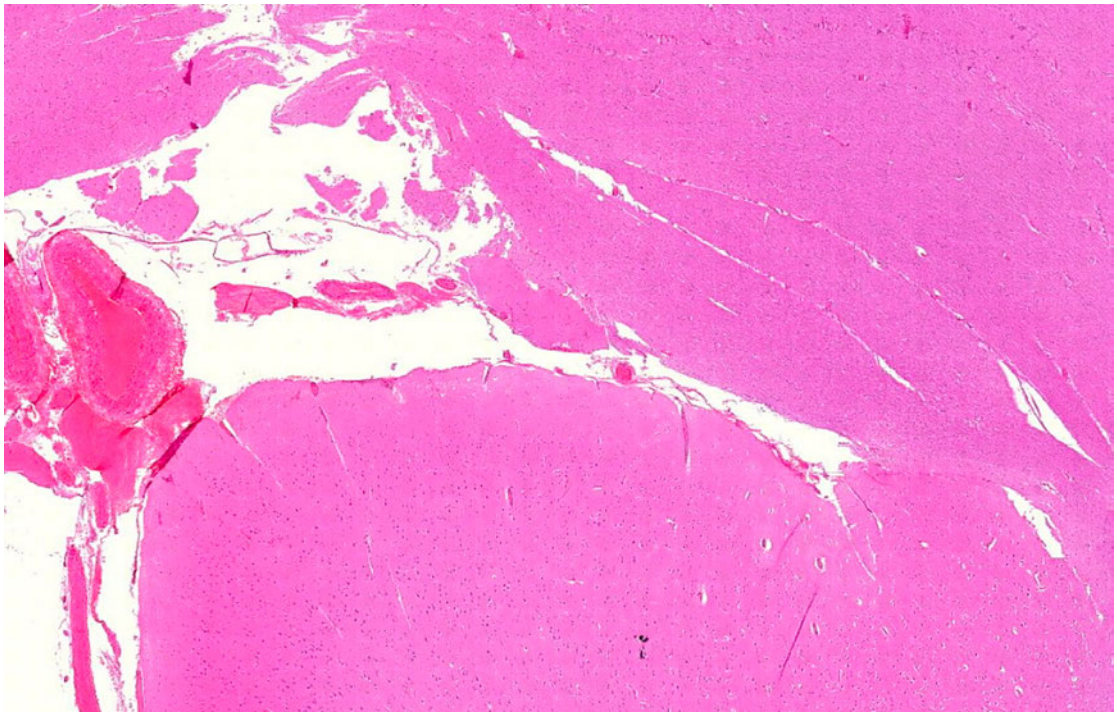
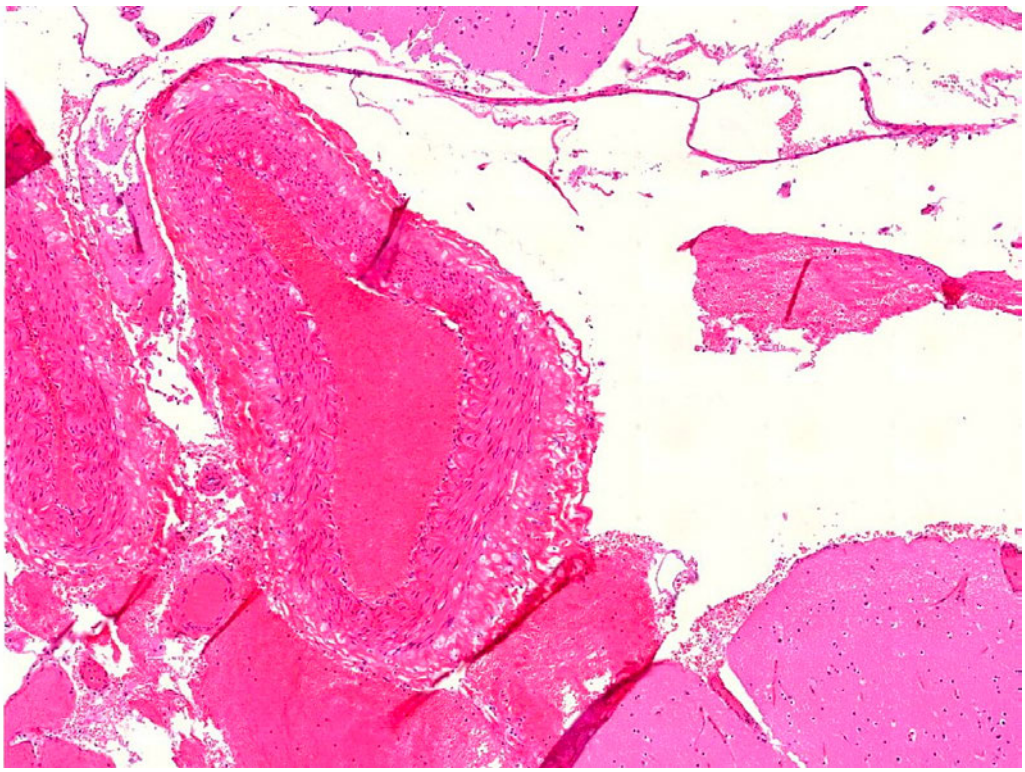
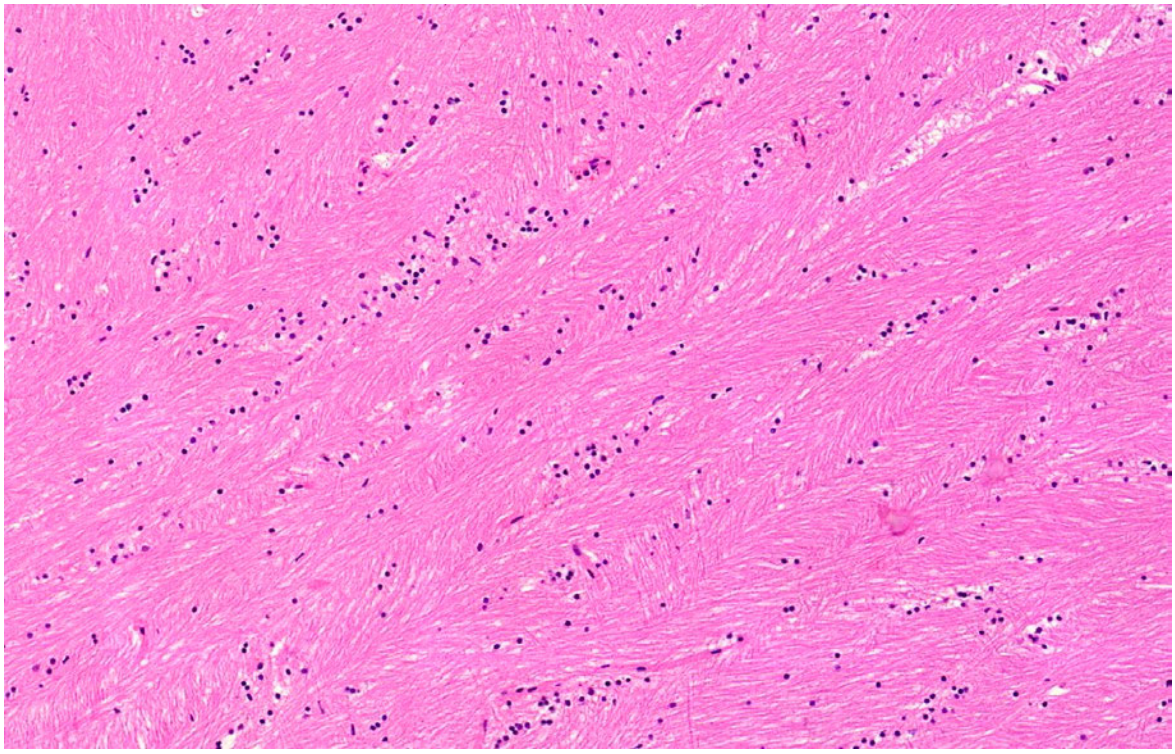


18-E



18-Ea



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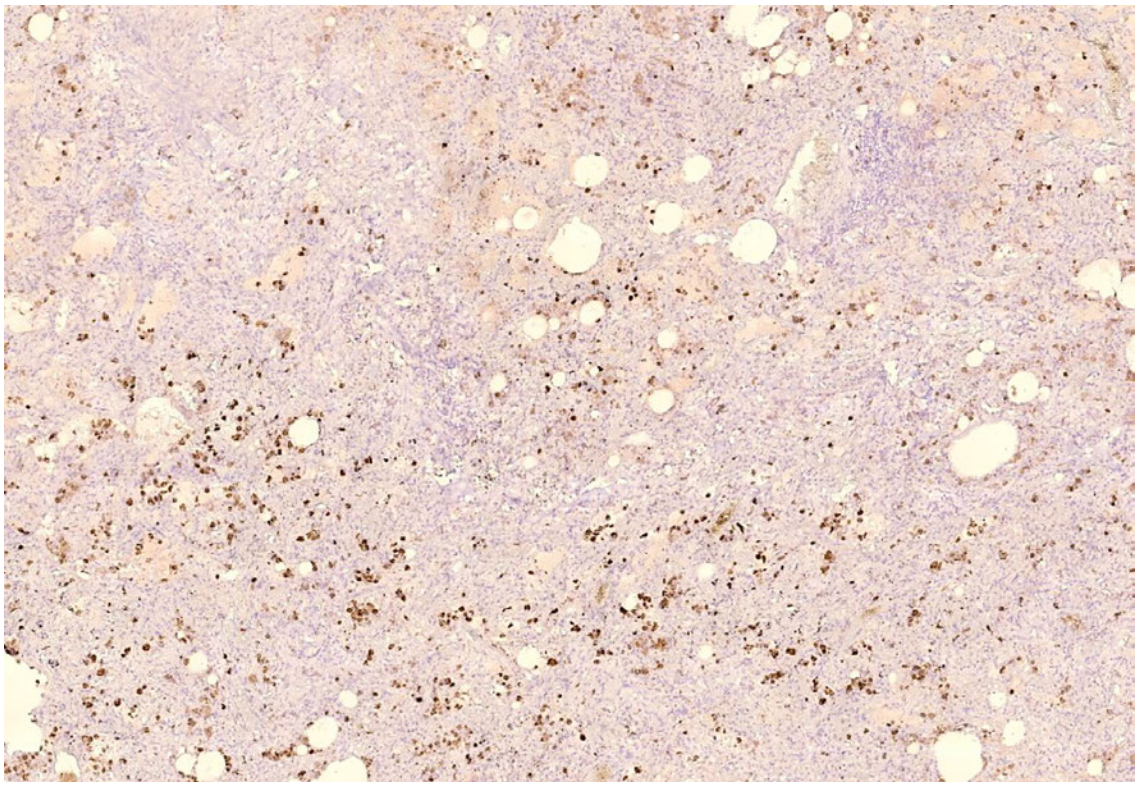
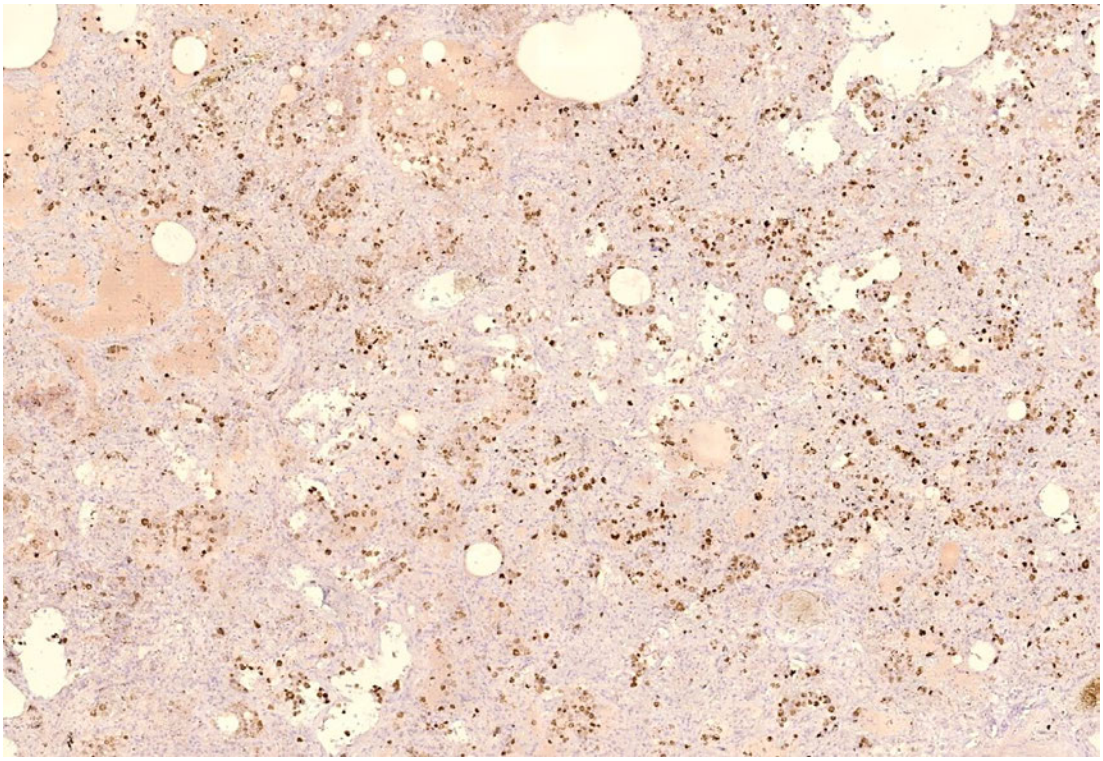


18-Lunge-CD020-1-b



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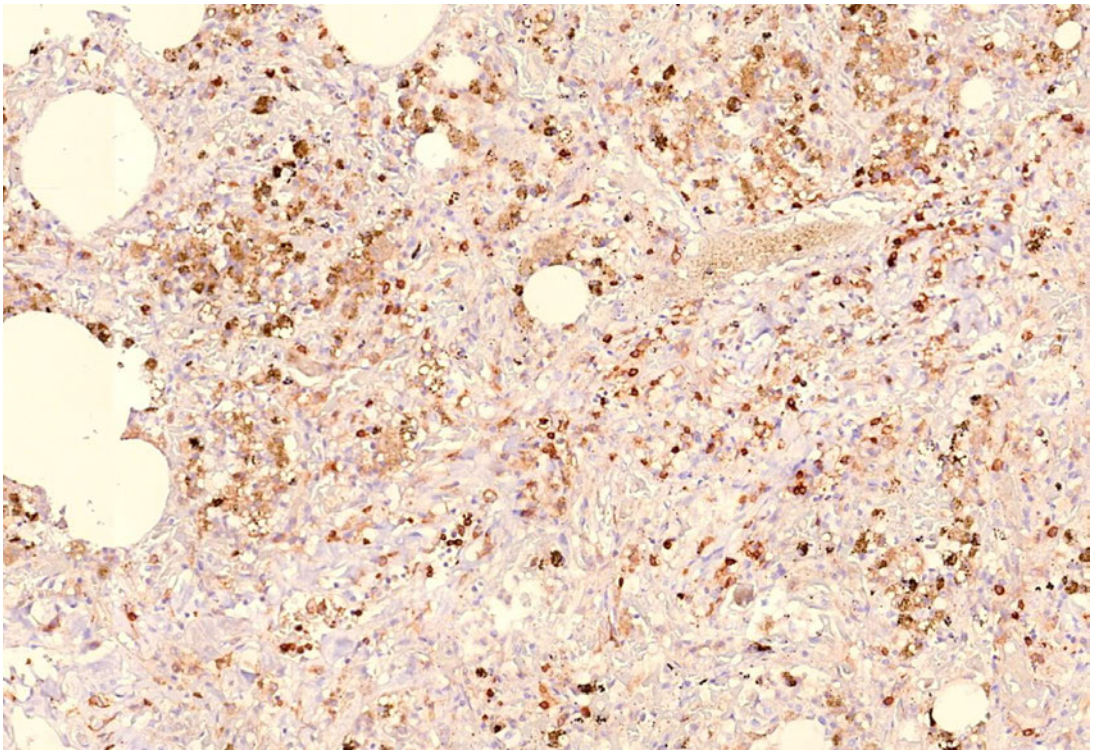

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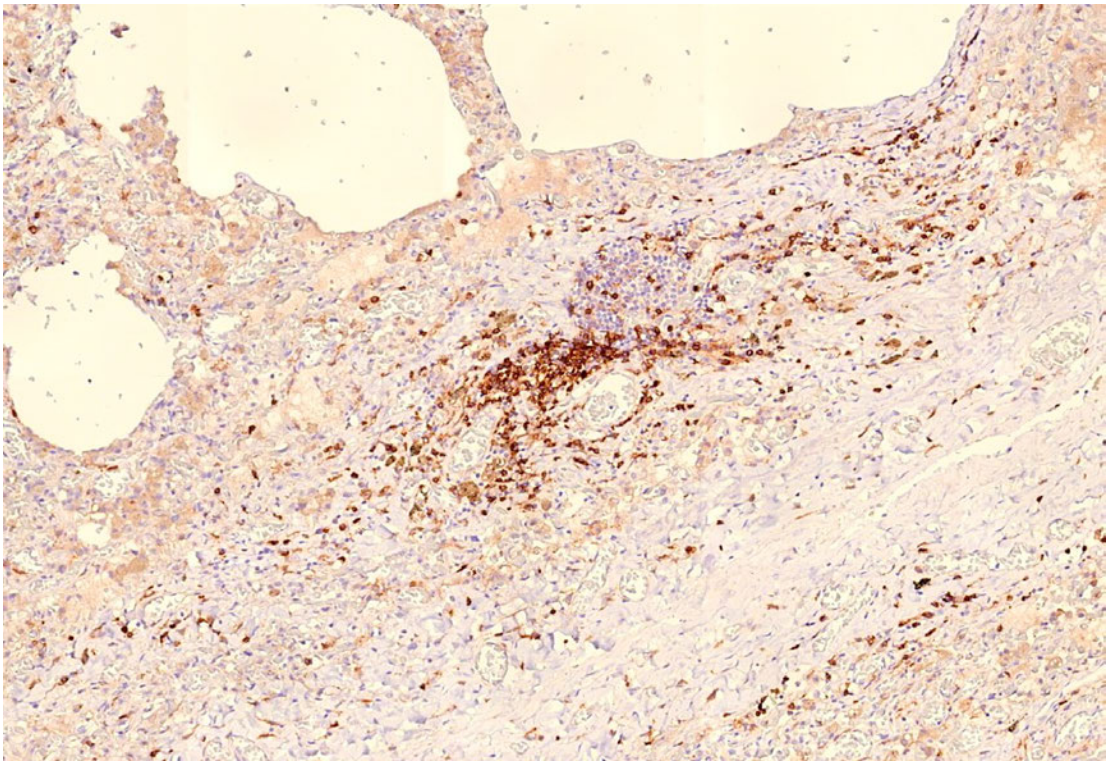

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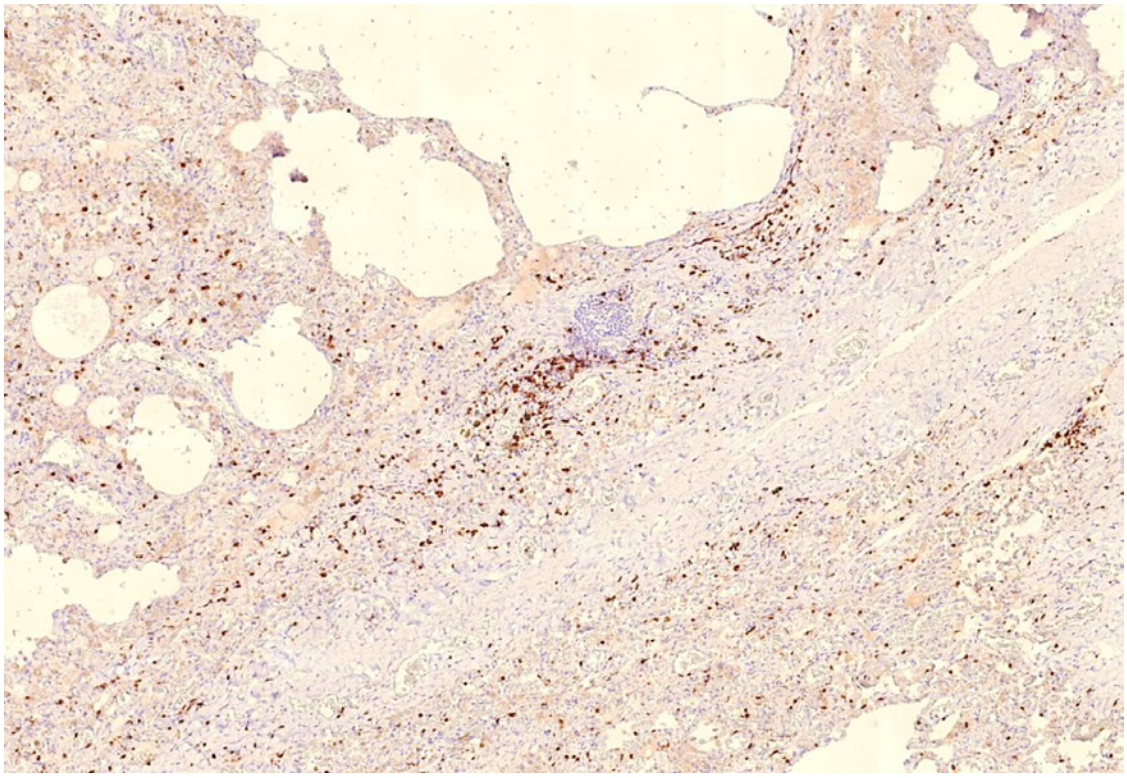

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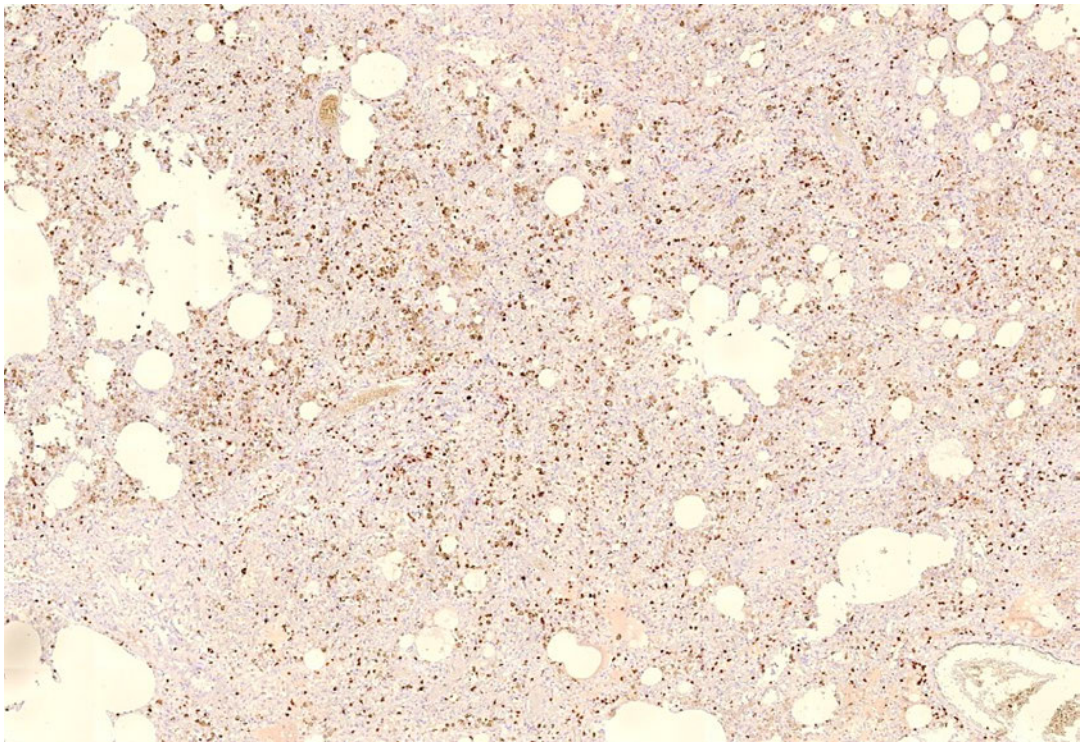

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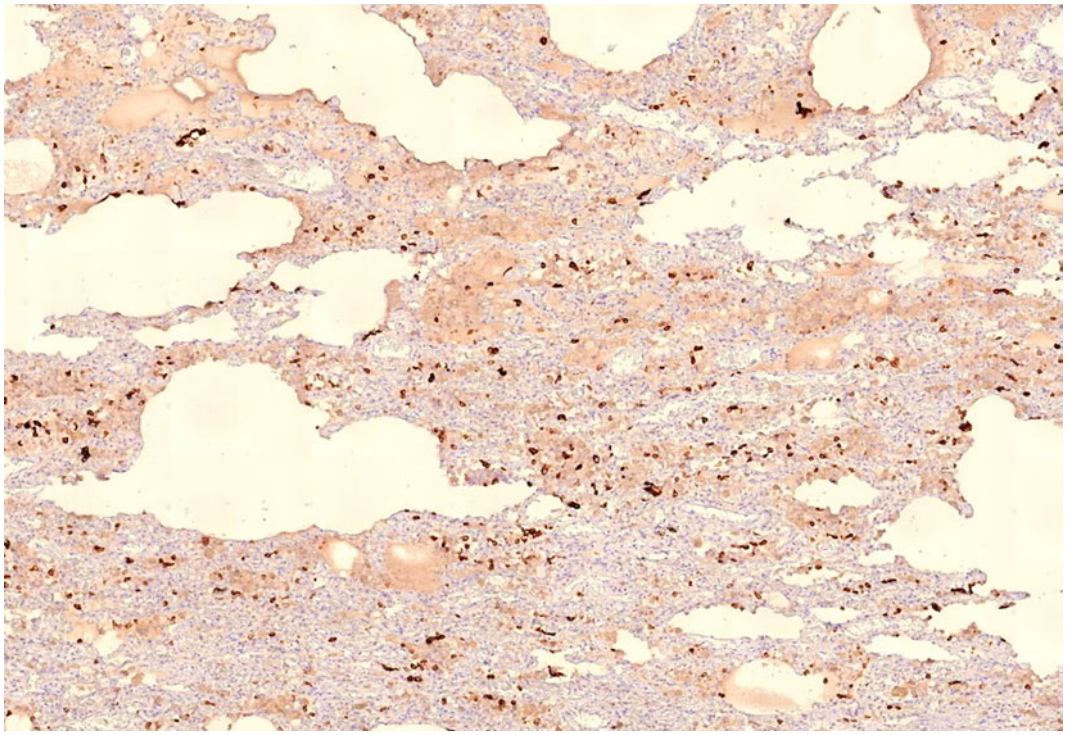
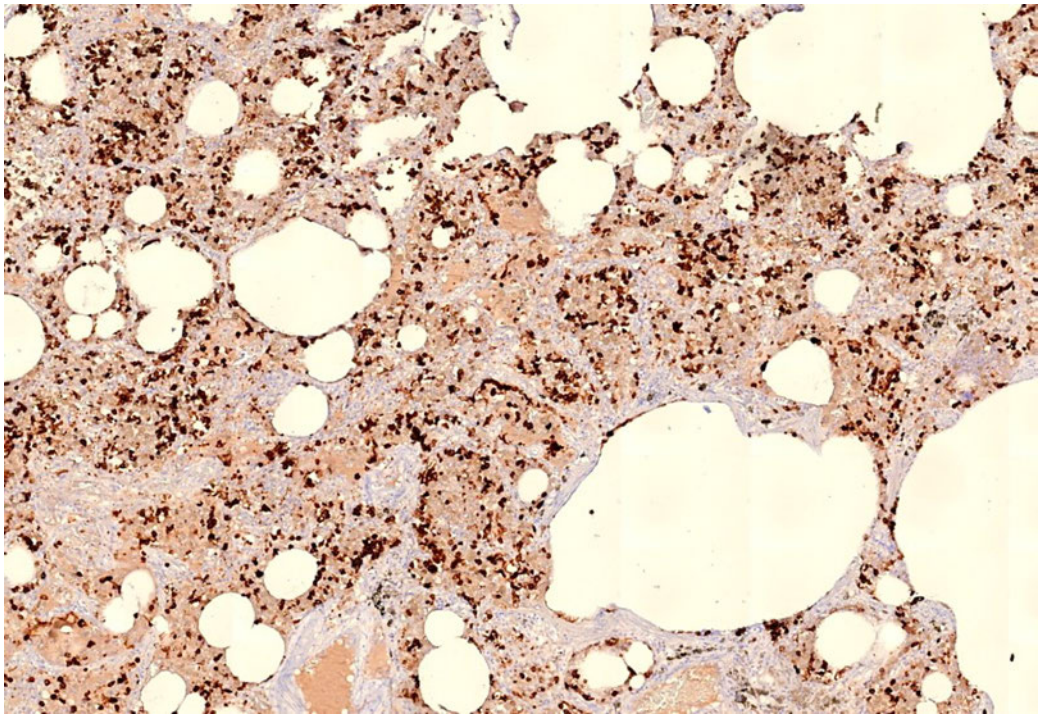
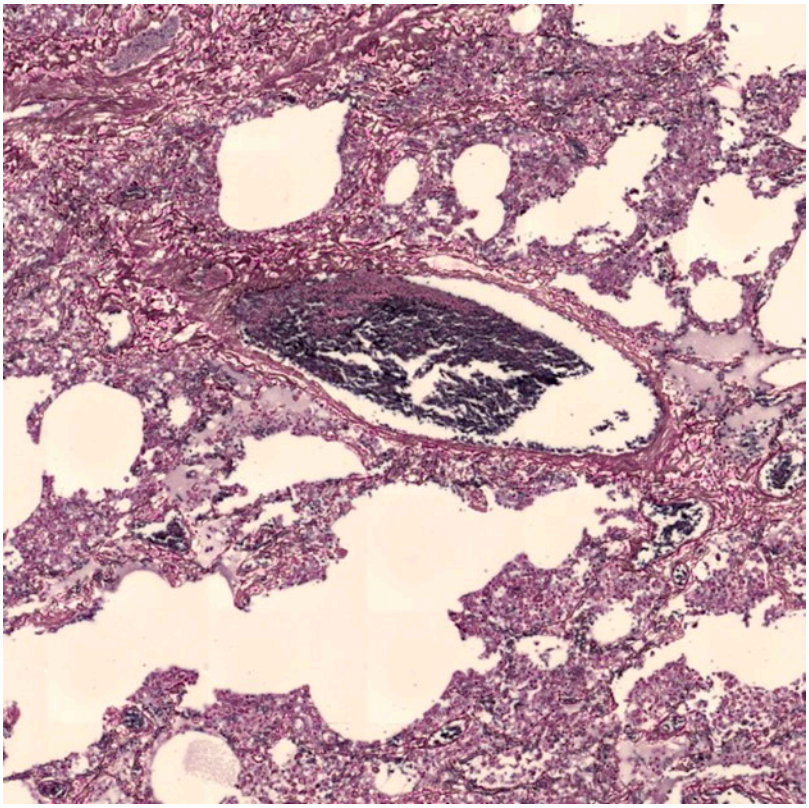


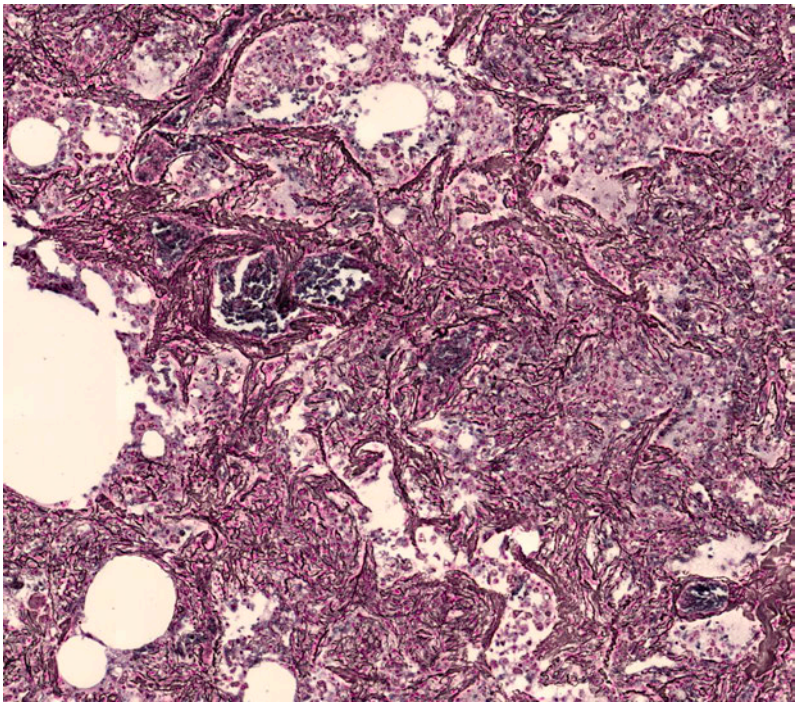
18-lunge-CK-7



18-lunge-CK-8-18



18-lunge-ag-a



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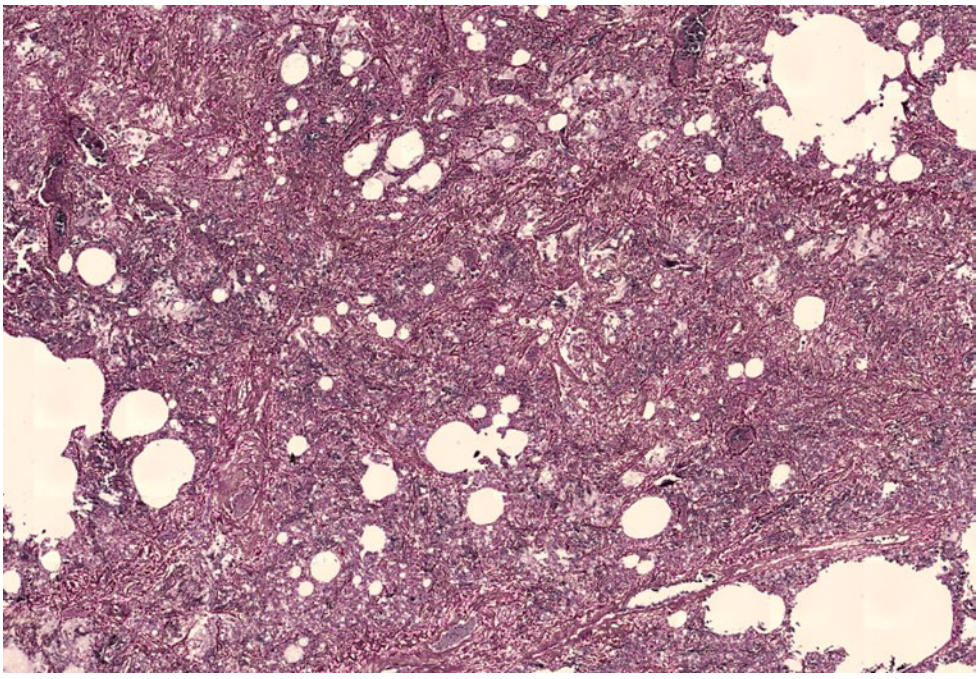

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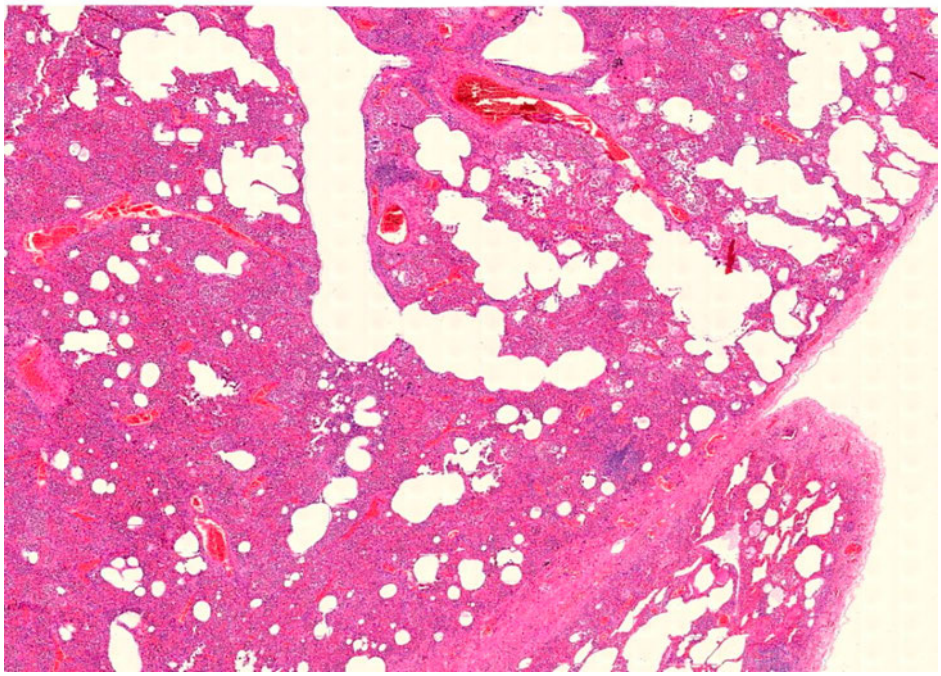

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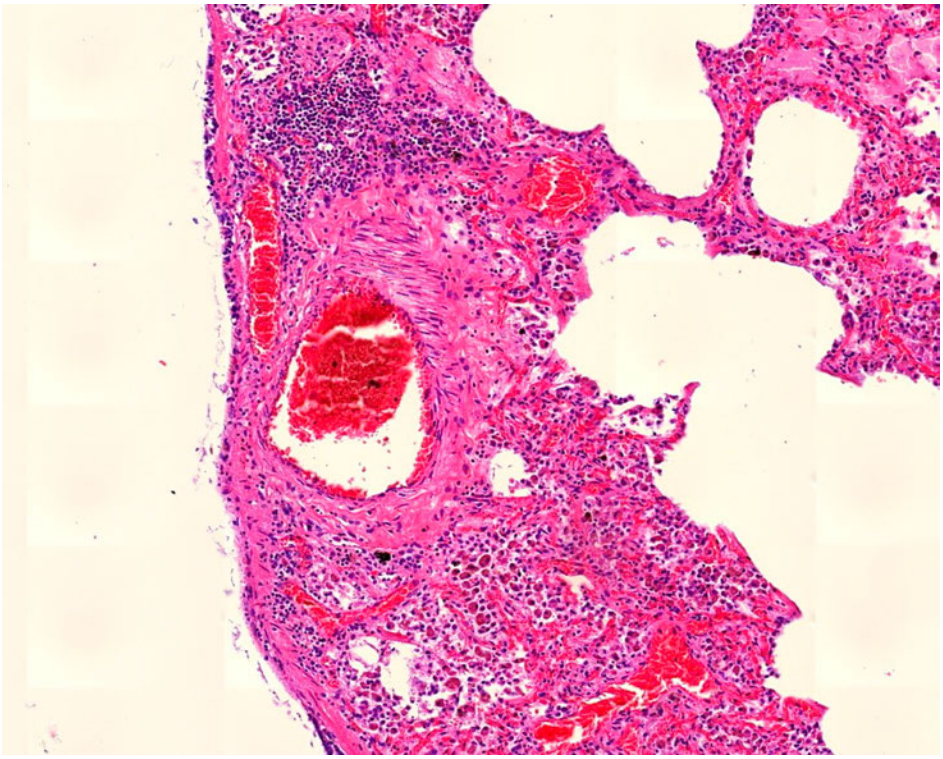

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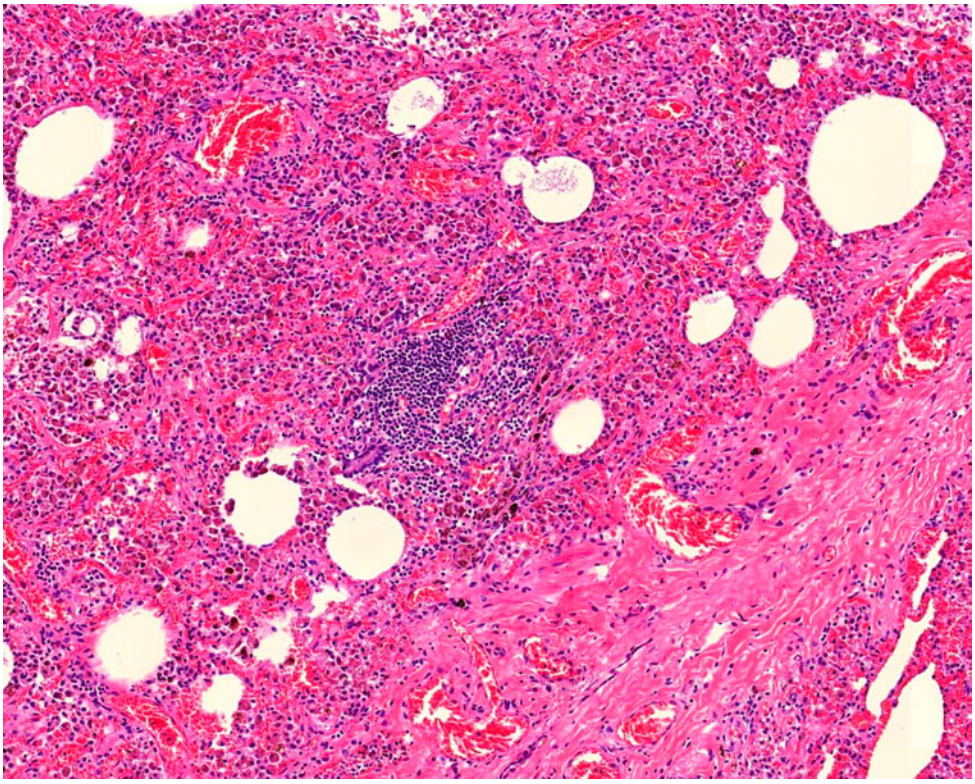

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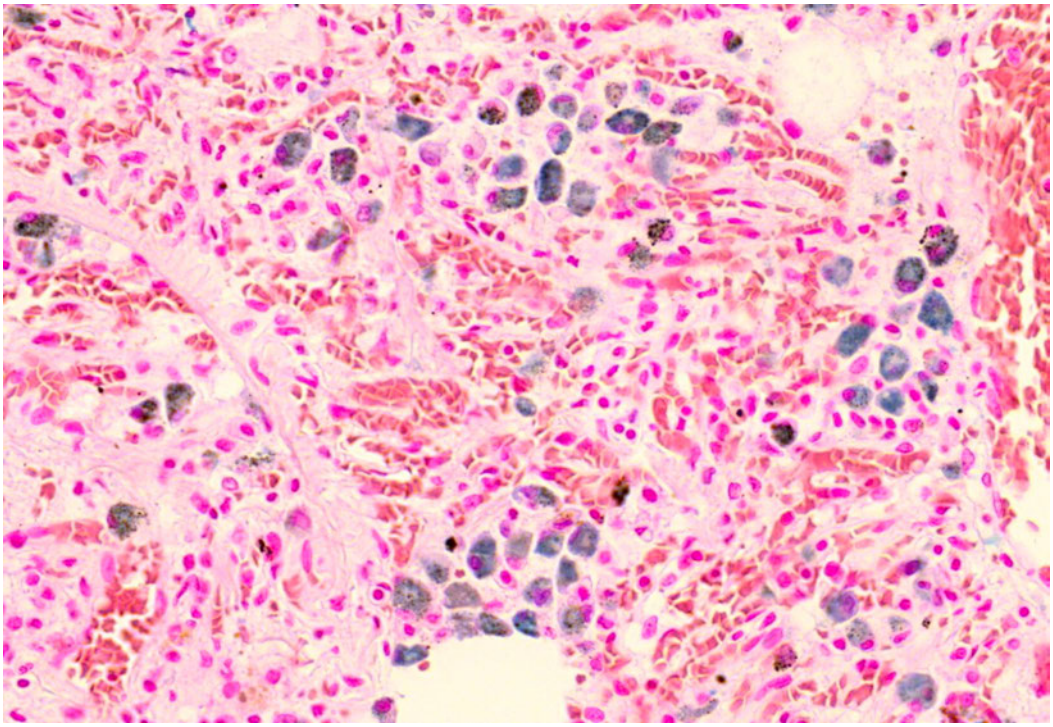

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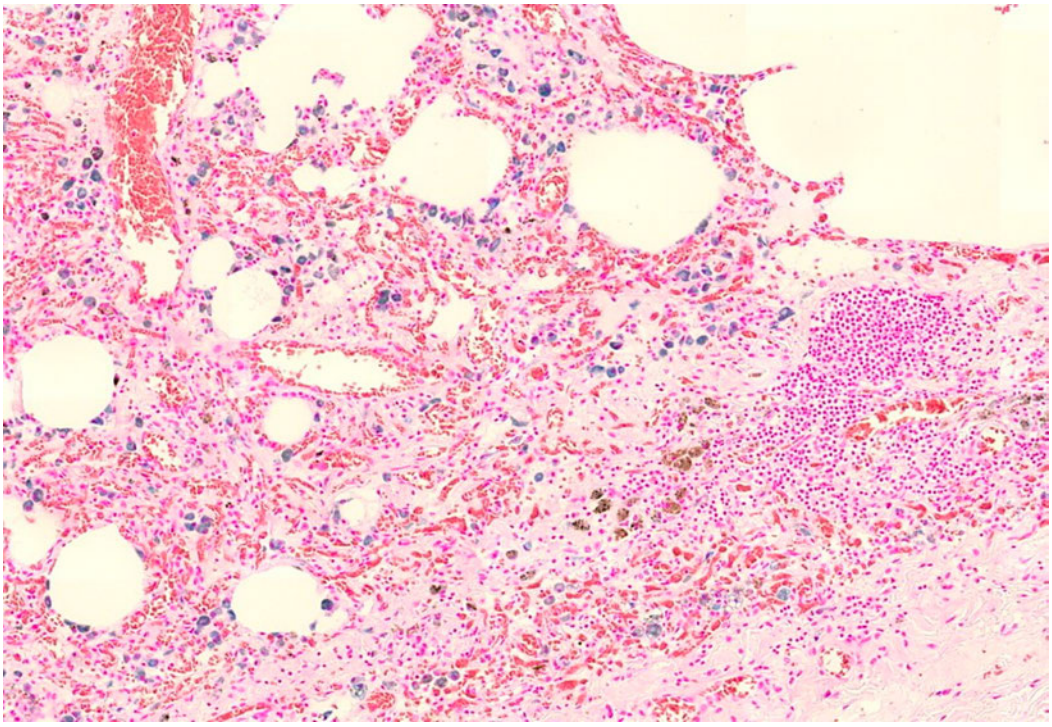

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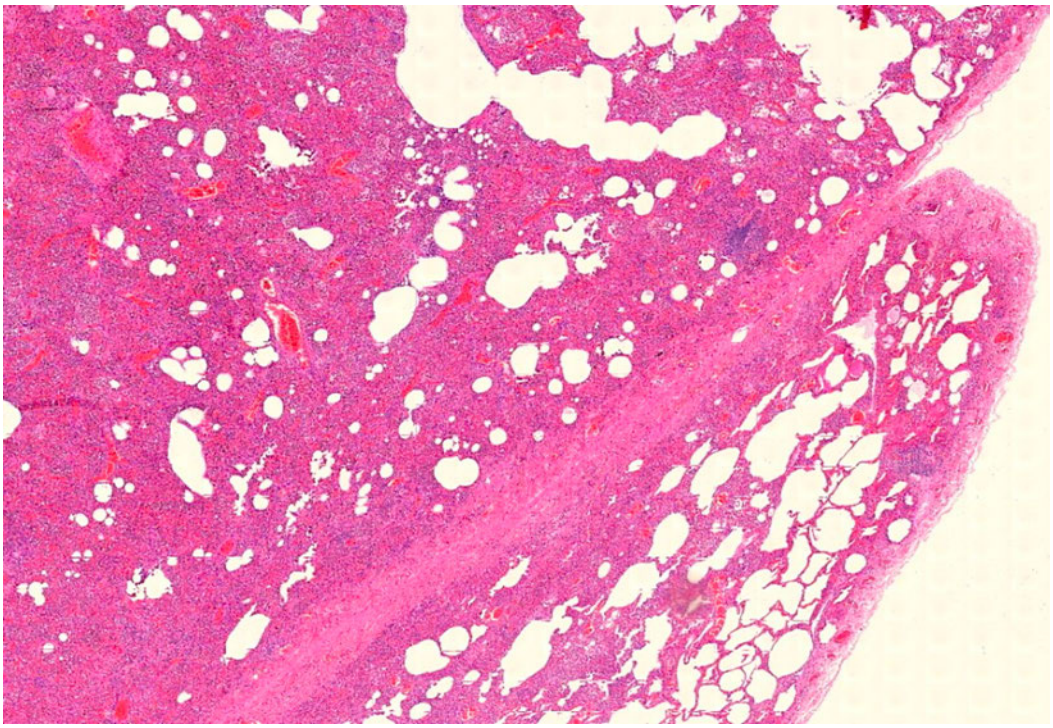

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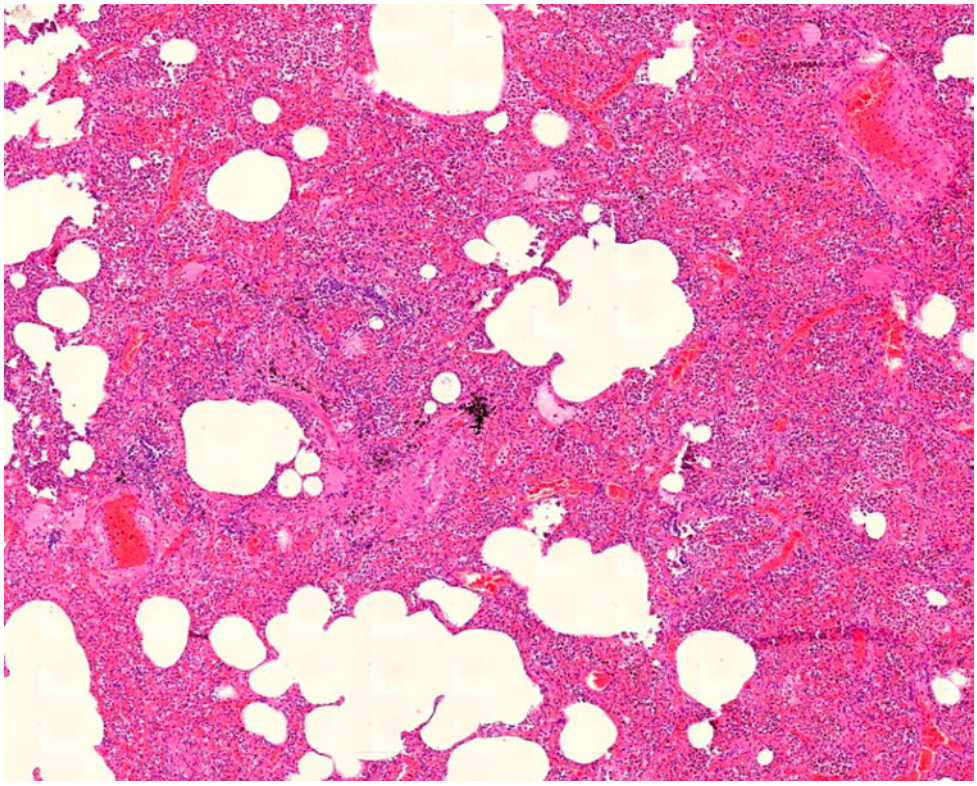

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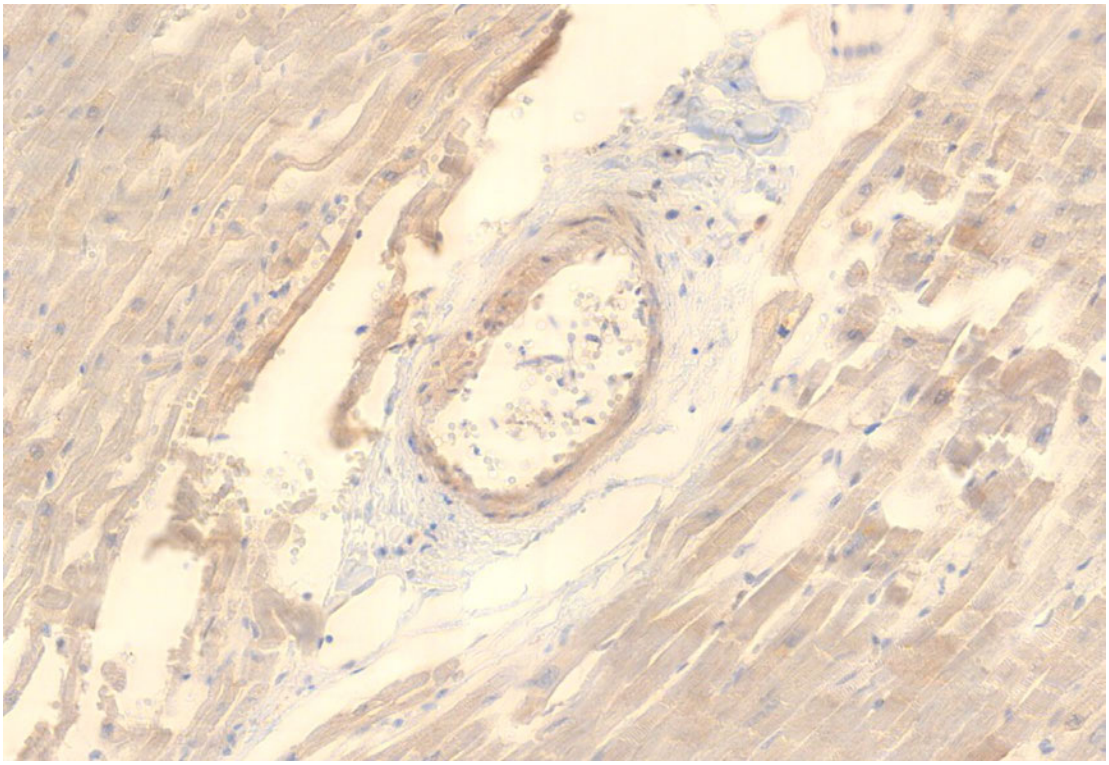
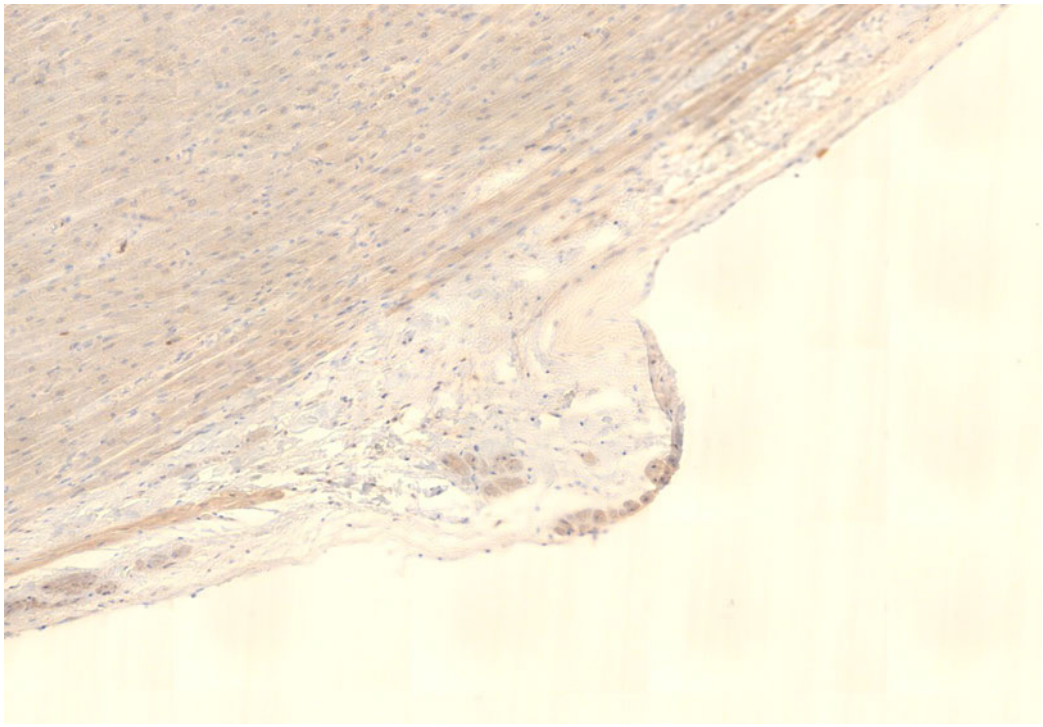


S-18-spike-a



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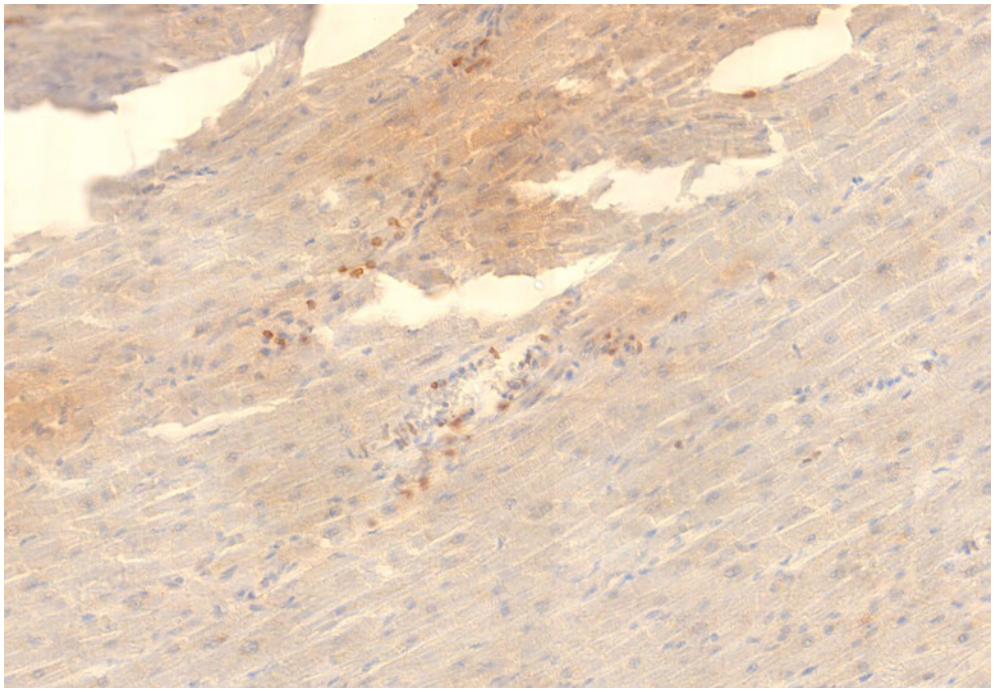

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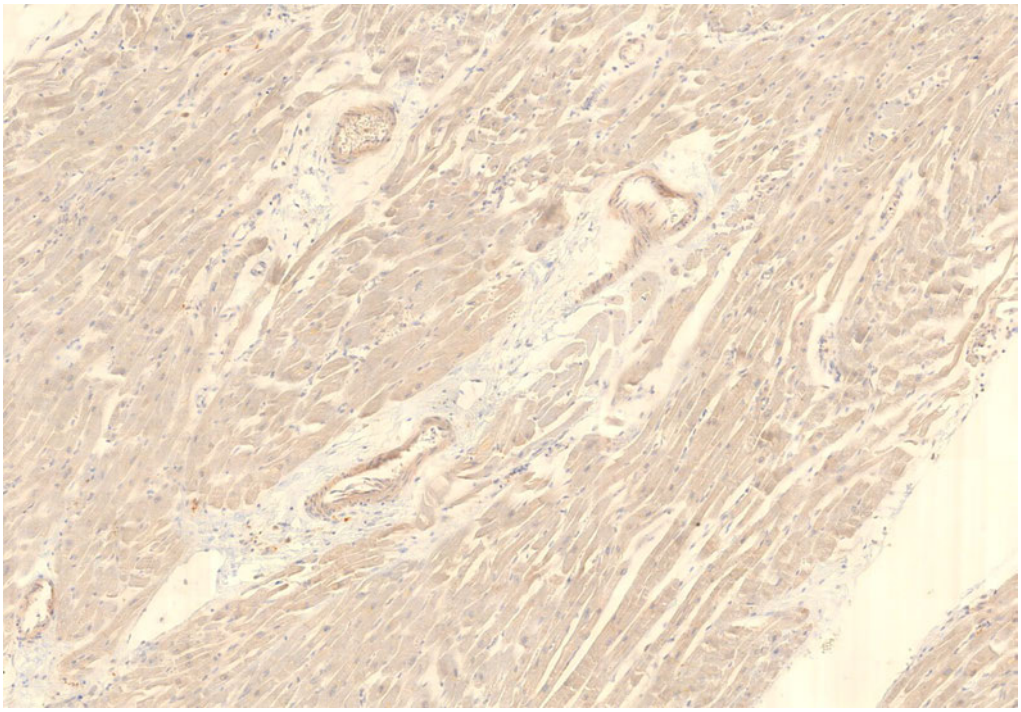
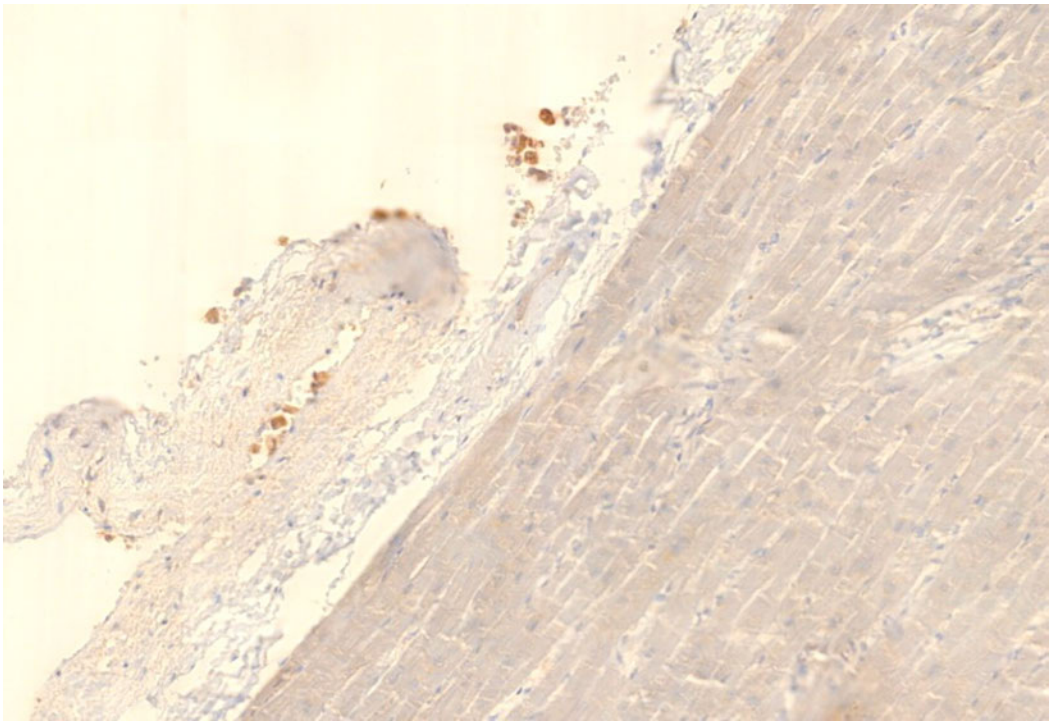
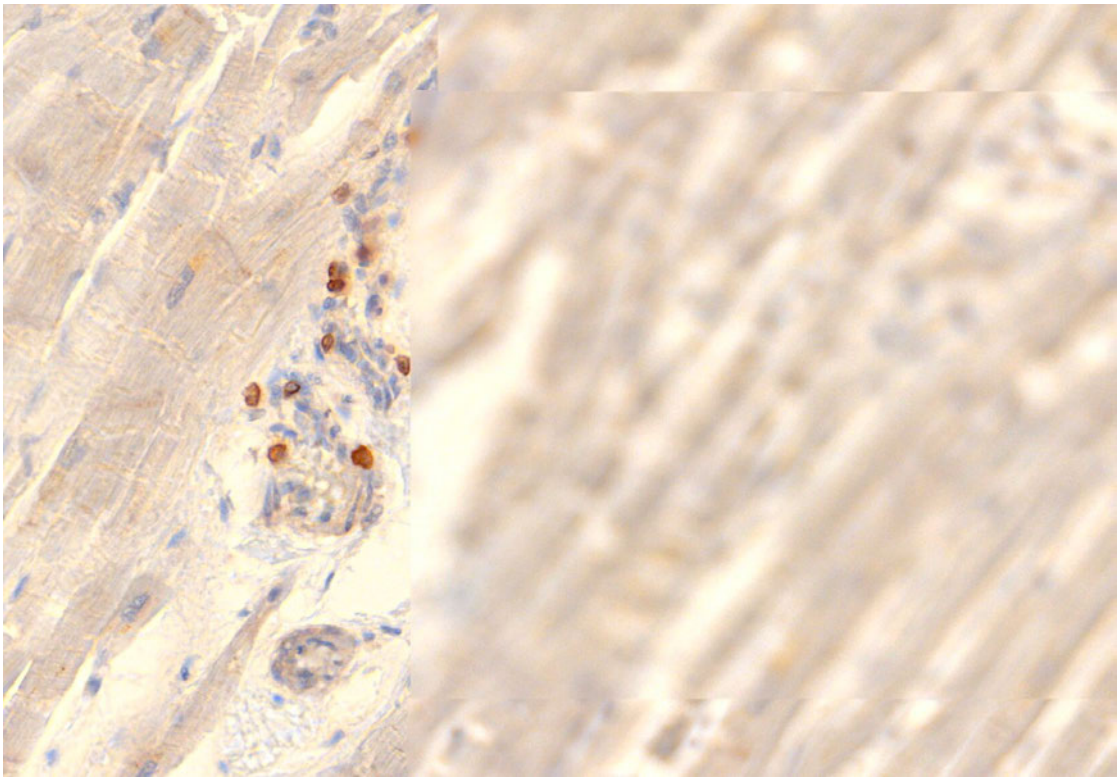


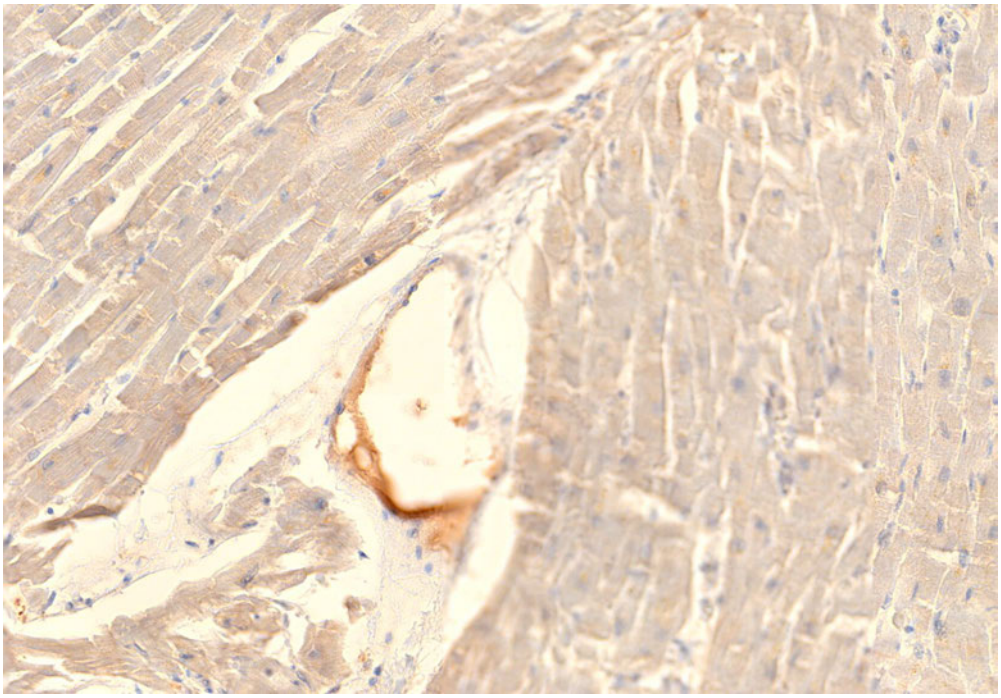
S-18-spike-c



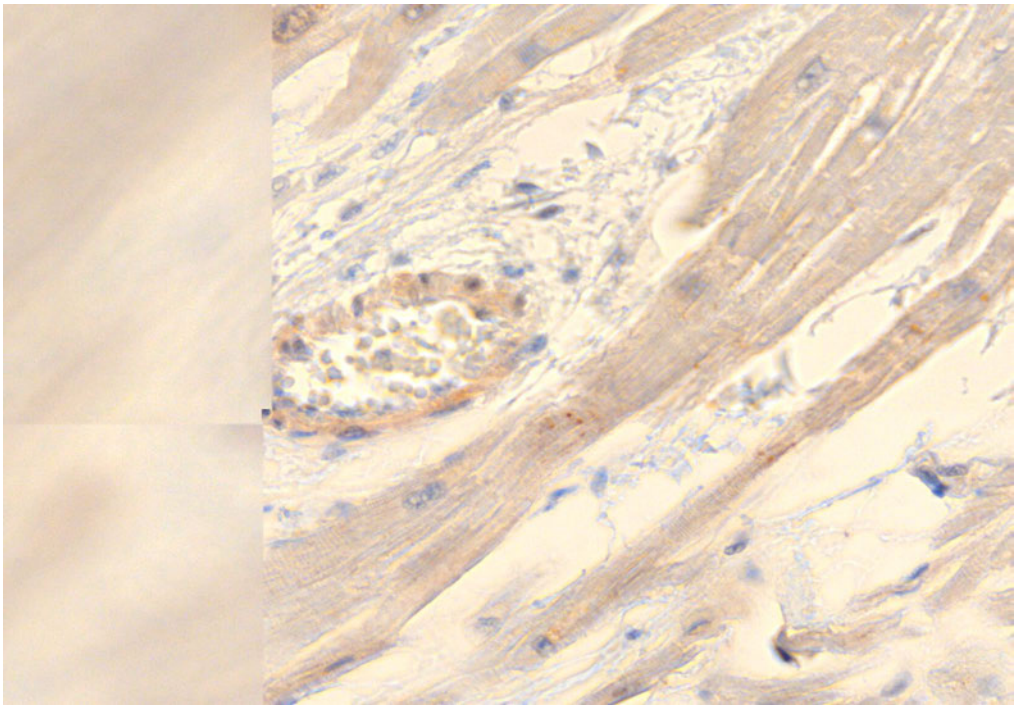
S-18-spike



Spike-18-a

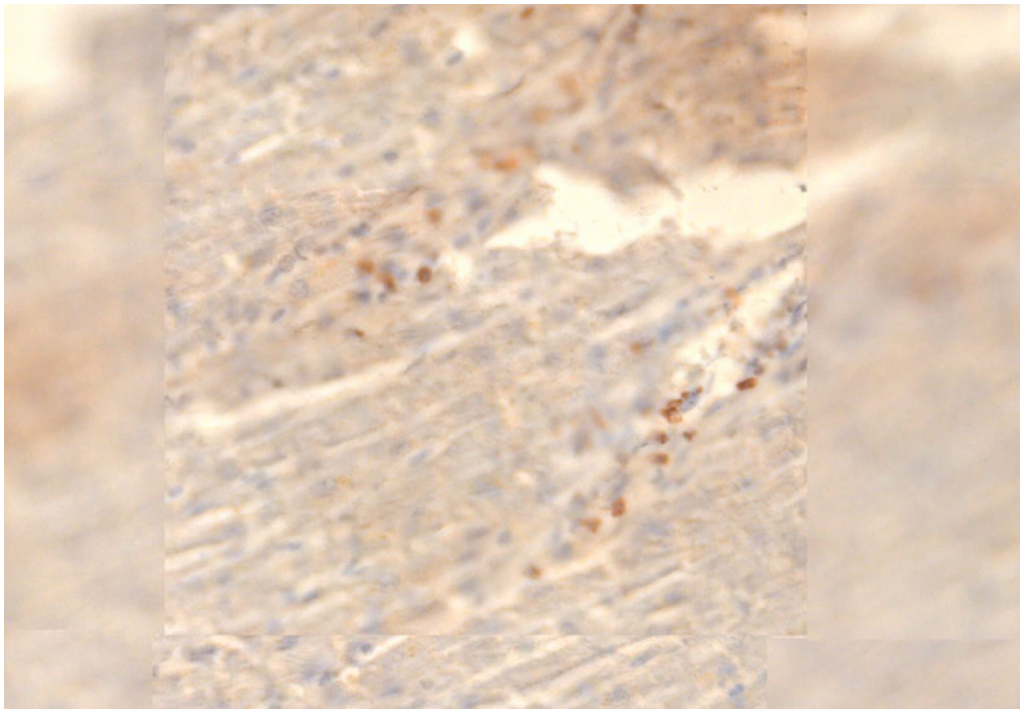


Spike-a8-b



Spike-18-c

Spike-18-d



Spike-18-y

18.8. Discussion:

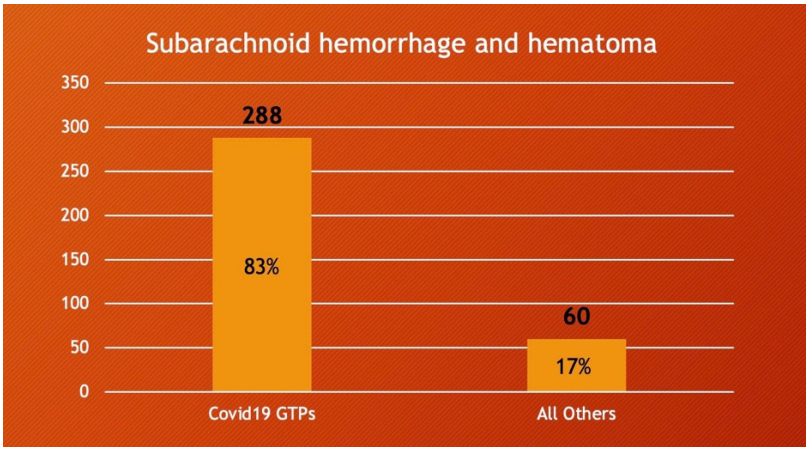
Case #18 reported herein was a 29 year old previously healthy man who had sudden onset of grand mal seizures followed by brain death less than 36 hours later. He received a dose of Astra Zeneca Covid 19 gene therapy product (GTP) 134 days before his death and a second dose of Covid 19 GTP 46 days before his death. The only symptoms recorded before onset of the seizure were mild headaches which occurred often. He lived long enough to undergo a CAT scan that showed bilateral subarachnoid hemorrhages.

An autopsy done at the hospital where he died showed interstitial lung disease with CD68 macrophage proliferation and iron deposits a sign of past tissue bleeding. The pathologist used the term condensation pneumopathy" implying a non-infectious etiology. His heart showed what was described as an uncharacteristic form of myocarditis because of the unusual profile of lymphocytes found the lung tissues (CD15, CD3, CD20, CD68, CD4, CD8). The brain showed signs of recent subarachnoid hemorrhage in both temporal lobes extending into the lateral ventricles, but no source of bleeding was found in the cerebral arteries.

The list of highly unusual findings continued to grow after Drs. Burkhardt and Lang reexamined the specimens. They found evidence of vaccine effects in brain, heart, lungs, liver, periadrenal fat, spleen, and testes. There was a pattern of lymphocytic infiltration, small vessel vascular damage, spike protein, inflammation of the vascular endothelium, reduced spermatogenesis.

The brain had involvement of the superior sagittal sinus, cerebral cortex, midbrain, and brain stem. The most profound changes were the bilateral temporal lobe hemorrhages without a vessel responsible but with extension into the lateral ventricles. Fresh thrombus was found in the superior sagittal sinus. Clotting and bleeding simultaneously after rapid onset is distinctly unusual particularly with the whole constellation of organ damage in this case.

The Vaccine Adverse Event Recording System (VAERS) lists 348 cases reports of subarachnoid hemorrhage and hematoma following vaccination since 1990 for the United States and Territories. Covid19 GTPs account for 83% of the reports.



VAERS #1963633-1 was a 15 year old female in Wisconsin had no medical problems until

Details for VAERS ID: 1963633-1

Event Information			
Patient Age	15.00	**Sex**	Female
State / Territory	Wisconsin	**Date Report Completed**	2021-12-20
Date Vaccinated	2021-06-19	**Date Report Received**	2021-12-20
Date of Onset	2021-12-02	**Date Died**	2021-12-19
Days to onset	166		
Vaccine Administered By	Unknown	**Vaccine Purchased By**	Not Applicable *
Mfr/Imm Project Number	NONE	**Report Form Version**	2
Recovered	No	**Serious**	Yes

* VAERS 2.0 Report Form Only
** VAERS-1 Report Form Only
"Not Applicable" will appear when information is not available on this report form version.

Event Categories	
Death	Yes
Life Threatening	No
Permanent Disability	No
Congenital Anomaly / Birth Defect *	No
Hospitalized	Yes
Days in Hospital	17
Existing Hospitalization Prolonged	No
Emergency Room / Office Visit **	N/A
Emergency Room *	Yes
Office Visit *	No

* VAERS 2.0 Report Form Only
** VAERS-1 Report Form Only
"N/A" will appear when information is not available on this report form version.

She received two doses of BNT162b2.

Vaccine Type	Vaccine	Manufacturer	Lot	Dose	Route	Site
COVID19 VACCINE	COVID19 (COVID19 (PFIZER-BIONTECH))	PFIZER\BIONTECH	NONE	1	IM	LA
COVID19 VACCINE	COVID19 (COVID19 (PFIZER-BIONTECH))	PFIZER\BIONTECH	NONE	2	IM	LA

One hundred and sixty-six days later she had a seizure or “posturing” (increased intercranial pressure) from a “…cerebral and intraventricular hemorrhage with mass effect secondary to a ruptured aneurysm” according to the VAERS report. She underwent a placement of injection of a coil into the region of the aneurysm to stop the hemorrhage. She had placement of EVD or external ventricular drainage to measure intercranial pressure then she underwent a craniotomy in which a segment of the skull was opened to relieve elevated pressure. A CAT scan revealed hemorrhage into her basal ganglia, lateral and third ventricles with subacute subarachnoid hemorrhage in her suprasellar cistern.

Her “symptom” list is below.

Symptom
ACUTE RESPIRATORY FAILURE
ALPHA HAEMOLYTIC STREPTOCOCCAL INFECTION
ANGIOGRAM CEREBRAL ABNORMAL
ARTERIAL CATHETERISATION
ARTERIAL SPASM
ASTHENIA
BLOOD CULTURE POSITIVE
BRAIN INJURY
CENTRAL VENOUS CATHETERISATION
CEREBRAL ENDOVASCULAR ANEURYSM REPAIR
CEREBRAL HAEMORRHAGE
CEREBRAL MASS EFFECT
COGNITIVE DISORDER
COMPUTERISED TOMOGRAM HEAD ABNORMAL
COVID-19
DEATH
DECOMPRESSIVE CRANIECTOMY
DRUG TITRATION
ECHOCARDIOGRAM ABNORMAL
EJECTION FRACTION DECREASED
ELECTROENCEPHALOGRAM NORMAL
ENDOTRACHEAL INTUBATION
EXTUBATION
GAIT INABILITY
GASTROINTESTINAL TUBE INSERTION
HEADACHE
HEART RATE DECREASED
HYPOPHAGIA
HYPOTENSION
INFUSION
INTENSIVE CARE
INTRACRANIAL PRESSURE INCREASED
INTRAVENTRICULAR HAEMORRHAGE
LABORATORY TEST ABNORMAL
LEFT VENTRICULAR DYSFUNCTION
MAGNETIC RESONANCE IMAGING HEAD ABNORMAL
MECHANICAL VENTILATION
MEDICAL INDUCTION OF COMA
MYDRIASIS
MYOCARDIAL STUNNING
PAIN
PERSONALITY CHANGE
POSITIVE AIRWAY PRESSURE THERAPY
POSTURING
PULMONARY OEDEMA
PUPILLARY LIGHT REFLEX TESTS ABNORMAL
PYREXIA
RUPTURED CEREBRAL ANEURYSM
SARS-COV-2 TEST POSITIVE
SEIZURE
SUBARACHNOID HAEMORRHAGE
SYNCOPE
ULTRASOUND SCAN
URINE OUTPUT INCREASED
VENTRICULAR DRAINAGE
VENTRICULAR HYPOKINESIA

A conference was held to review the recent MRI,

> Care conference on 12/14 to discuss MRI results with family. Neurology explained likely deficits patient will experience as a result of her brain injury including weakness of both sides of her body, inability to walk, inability to effectively eat PO, personality changes, cognitive dysfunction.
>
> Mother voices "'Patient would not want to live like this,"" but requests time to discuss these options with family before making any decisions'.

The young girl died 17 days after admission.

We do not have the hospital records or a discussion with the doctors. Such cases are complicated and should be studied intensively due to the unusually widespread changes in her brain and what might have been myocarditis. No autopsy was noted in government records.

After studying Case #18 from the Burkhardt Lang collection in which we saw multiple unusual rapid onset medical problems in a previously healthy man. **VAERS #1963633-1** is not so baffling.

Exhibit: VAERS #1963633-1

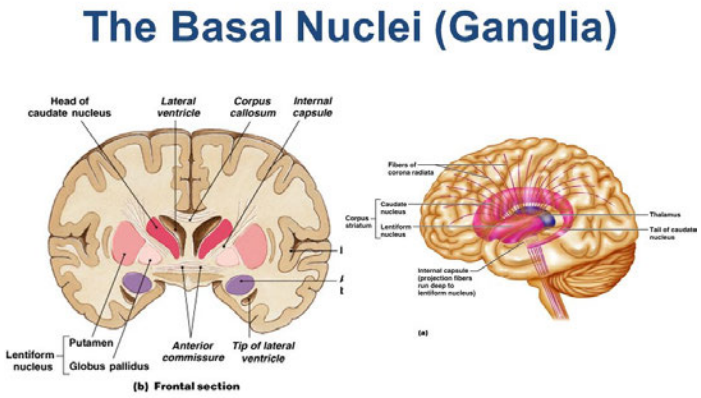
"In brief, patient is a previously healthy 15 year old who had acute headache and collapse at home, concern for posturing versus seizure, and ultimately found to have cerebral and intraventricular hemorrhage with mass effect secondary to ruptured aneurysm. S/p coiling of aneurysm, bilateral EVD placement and R decompressive craniectomy.

She has acute respiratory failure, strep viridans bacteremia, and concurrent COVID-19 infection.

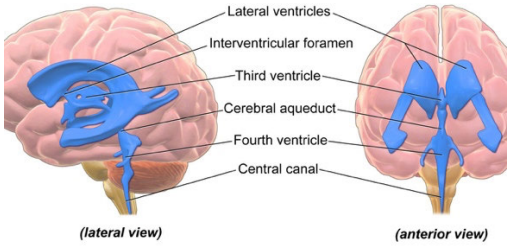
Presented 12/2/21 with aneurysm and **incidentally found to be COVID positive.**

NEURO: On arrival, she was somewhat responsive and by the time she arrived at ED she was posturing versus seizing.

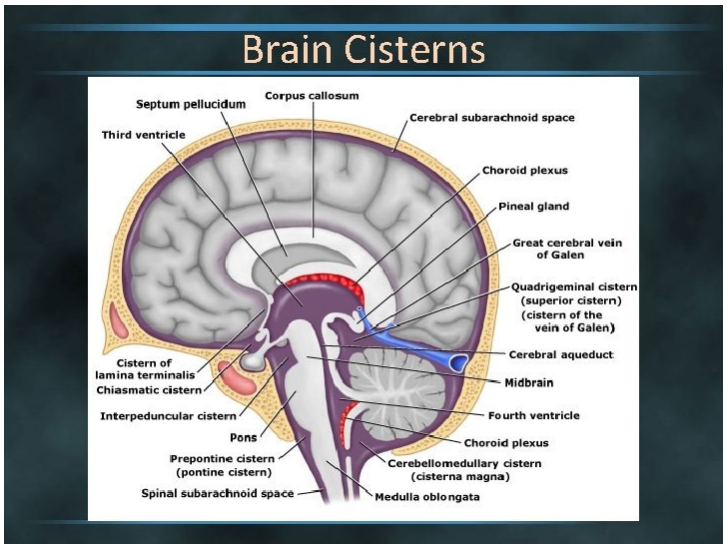
Head CT revealed hemorrhage 3x3x3 hemorrhagic f**ocus anterior and inferior to the right basal ganglion with mass effect**,



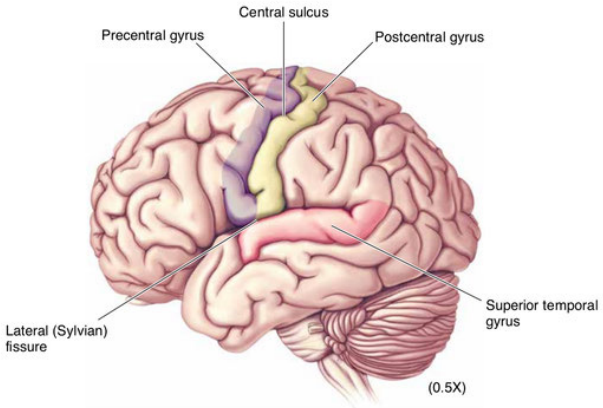
also with **intraventricular blood in lateral and third ventricles**



with **acute subarachnoid hemorrhage in suprasellar cistern**



and bilateral sylvian fissures.



At that time, reportedly pupils equal, 3-4, minimally reactive. At ED, received Mannitol bolus, and 4mg Ativan administered. Flight for Life activated and upon arrival to CW was admitted to the PICU with plan for emergent EVD placement.

Neurosurgery placed EVD at bedside. Repeat head CT and CTA performed and demonstrated bilobed aneurysm arising from right ICA terminus with enlarging intraparenchymal hematoma along superior aspect mostly likely representing a ruptured aneurysm, increased intraventricular hemorrhage, similar subarachnoid hemorrhage, increased mass effect, effacement of basal cisterns, worsened midline shift.

Optimized neuroprotection management with sedation, neuromuscular blockade, ventilator management, and hypertonic saline. R pupil became dilated and nonreactive and patient demonstrated persistently elevated ICPs >50.

She underwent emergent IR coiling and R decompressive craniectomy with second right sided EVD placement. Patient continued to demonstrate ICPs in 20s. Worked with Neurosurgery to optimize sedation.

Repeat head CT demonstrated increased hypoattenuation in right frontal and parietal lobes, left parietal lobe, and splenium of corpus callosum.

Loss of gray-white differentiation concerning for ischemic change. Increased right to left midline shift. TCDs demonstrated moderate spasm of the L MCA. EEG without seizure.

Started Pentobarbital coma. On 12/9, an occurred episode while in transport to MRI and patient was noted to be obtunded. ICP 11 during episode, EVDs patent.

She was not connected to LTM during episode, as she was in transport. She was started on epi drip and became more responsive, moving spontaneously and withdrawing to pain. On 12/10, her neurostorming medication regimen was optimized and no further changes were made.

Given poor neurologic prognosis, patient was given adequate sedation for pain management during terminal extubation on 12/18.

CV: Had periods of hypotension intraoperatively requiring initiation of Epinephrine and Norepinephrine infusions to maintain goal MAP > 80, SBP > 120. Returned to PICU with femoral CVL, arterial line, sedated with Fentanyl and Dexmedetomidine infusions, and on Vecuronium infusions, Nimodipine.

On 12/4 echocardiogram report noted significant for left ventricular mid-inferoseptal hypokinesis and moderately diminished left ventricular systolic function, with an LVEF 41%. She required titration of pressors to maintain goal pressures.

Added stress dose Hydrocortisone. Repeat echocardiogram demonstrated significant **improvement in LV systolic function, consistent with the hypothesis that myocardium was neurologically stunned.**

12/6-12/8 Patient weaned from sedation and pressors.

On 12/9 she experienced a hypotensive episode while in transport to MRI. HR dropped to 40s-50s. 105 mcg Epi dwindle given, then started on Epi drip, given 500 mL NS push pull. HR and BP normalized.

On 12/10, patient was weaned from pressors and stress dose steroids. She remained hemodynamically appropriate leading to terminal extubation on 12/18. RESP: Intubated in the OR.

Notably, course complicated by significant pulmonary edema with poor compliance. On 12/10, her ventilator settings were weaned to CPAP/PS. She remained hemodynamically appropriate with CPAP/PS until terminal extubation on 12/18.

FEN/GI: On 12/10 patient was started on enteral feeds which were discontinued after terminal extubation on 12/18.

ID: At ED, she was incidentally found to be COVID positive. Blood cultures were drawn at that time positive for strep viridans. She started on empiric Cefepime and Vancomycin due to concern for septic shock given pressor requirements. Initiated thermoregulation. Patient continued to be intermittently febrile and remained on Ceftriaxone per family's wishes until

12/19. RENAL: Initially had significantly increased urine output. Labs concerning for DI, although could also be secondary to 3% boluses. Initiated DI protocol. This later resolved and she continued to have urine output appropriate for age leading to her terminal extubation on

12/18. OTHER: On 12/5 ,discussion took place between provider and mother and placed partial code status, including no bolus cardiac resuscitative medications, no defibrillation, no chest compressions.

Care Conference took place on 12/10, during which mother voiced she would like to get MRI for further neuroprognostication before changing goals of care.

Care conference on 12/14 to discuss MRI results with family. Neurology explained likely deficits patient will experience as a result of her brain injury including weakness of both sides of her body, inability to walk, inability to effectively eat PO, personality changes, cognitive dysfunction.

Mother voices ""Patient would not want to live like this,"" but requests time to discuss these options with family before making any decisions.

Another discussion between providers and family on 12/15 during which family voiced they would not want patient to be reintubated once extubated, would not want her to receive blood products, and would like to continue with enteral feeding.

Tentative plans for extubation on 12/17 or 12/18 once family from out of state has come to say their goodbyes.

Family later decided to move forward with terminal extubation on 12/18. She was extubated 12/18 to room air and passed away on 12/19/2021 @ 20:37 PM with mother, brother and stepfather at the bedside."