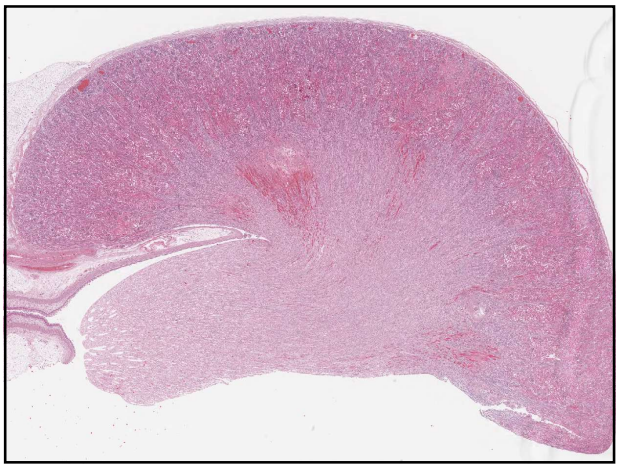
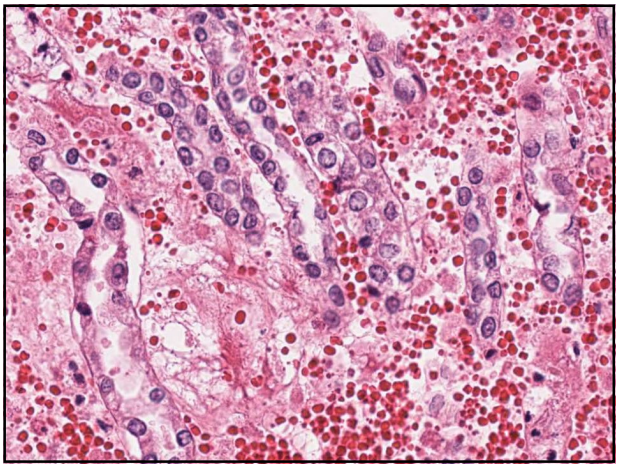
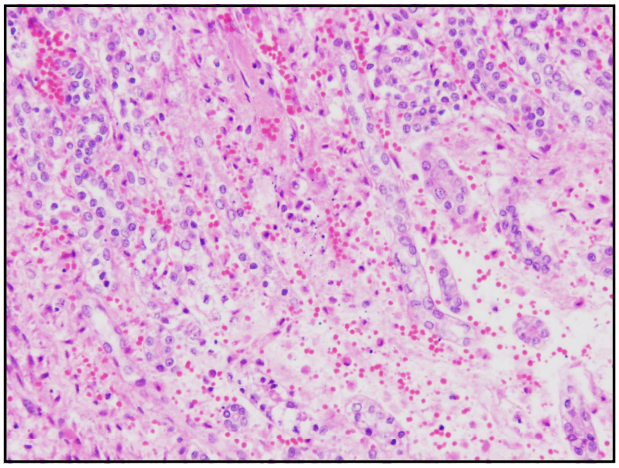
Fall 26 – Hund

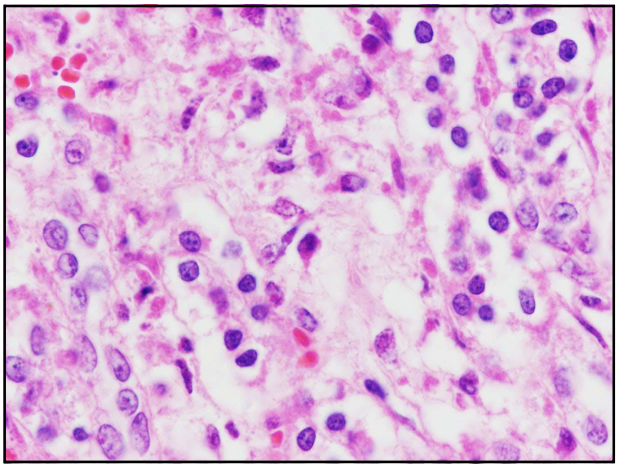
- Hund, ca. 3 Wochen alt

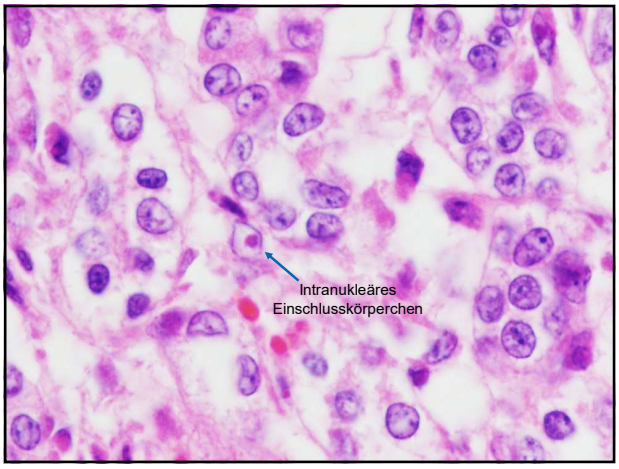
Vorbericht: Abdominalschmerz, V.a. Hepatitis











Fall 26 – Hund

Morphologische Diagnose:

Tubuläre Nekrose und Blutung mit (geringgradiger) lymphohistiozytärer interstitieller Nephritis und intranukleären Einschlusskörperchen

Canines Herpesvirus 1

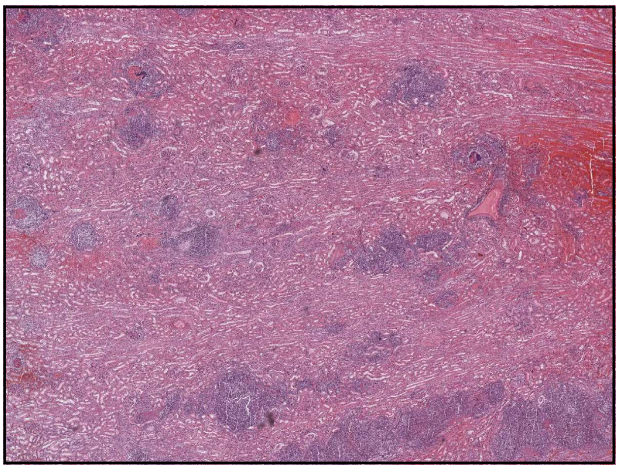
- Alphaherpesvirus
- Fataler Verlauf bei < 2 Wochen alten Tieren
- Infektion *intrauterin,* während Geburt oder *postpartal* (horizontal)
- Petechien und Ekchymosen (Serosa), Flüssigkeit (Thorax, Abdomen), Nierenblutungen (!), Lungenödem, vergrößerte Lymphknoten, Splenomegalie
- Nekrosen in Lunge, Herz, Nieren, Darm, Pankreas, Nebennieren und Milz mit (einzelnen) intranukleären Einschlusskörperchen; Meningoenzephalitis

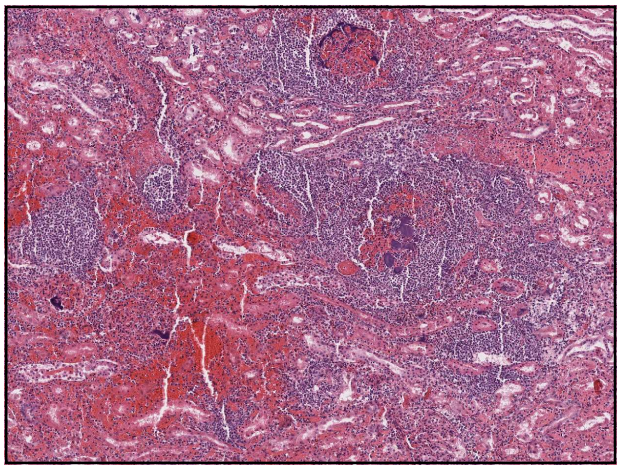
Fall 27

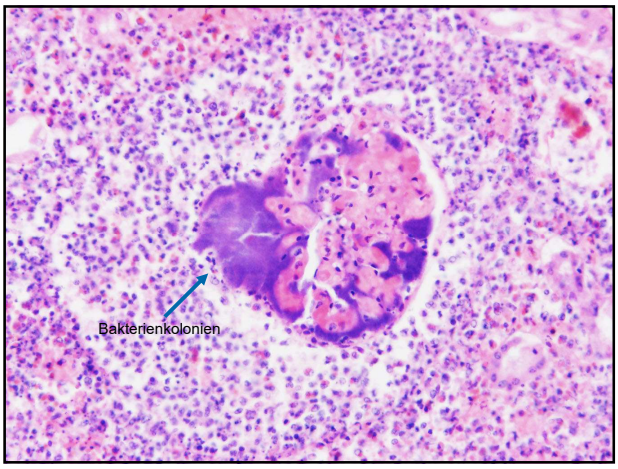
Fall 27 – Pferd

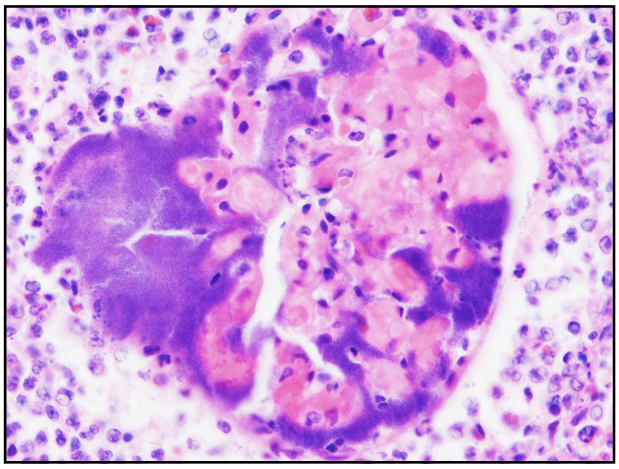
- 5 Jahre alt, tragende Stute

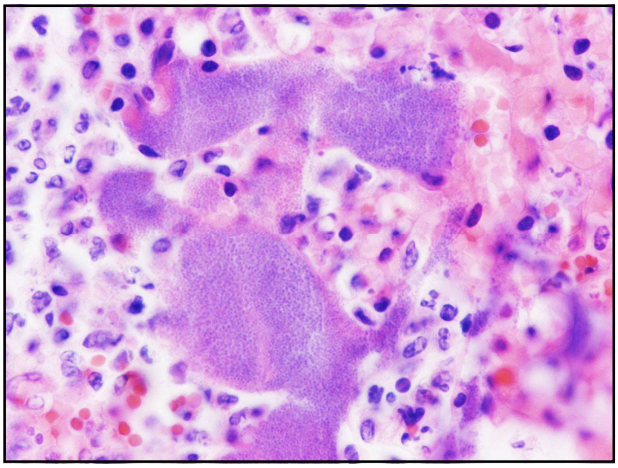
Vorbericht: Fieber, Inappetenz

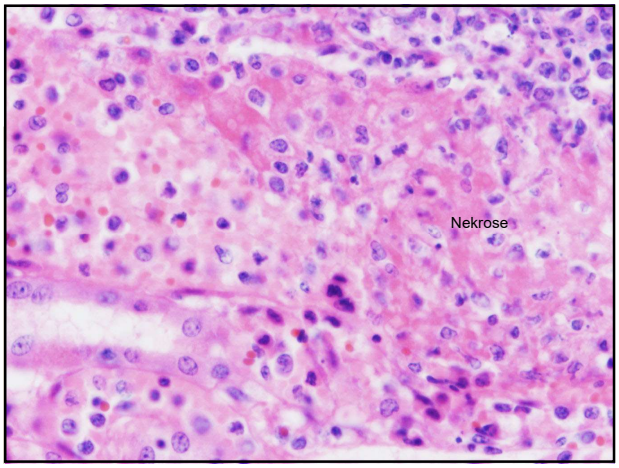








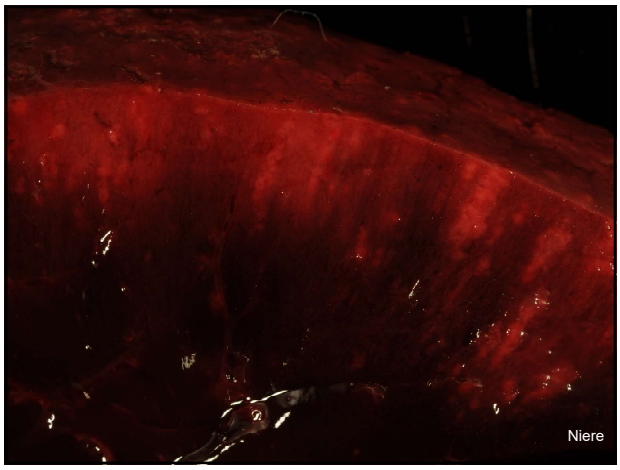




Fall 27 – Pferd

Morphologische Diagnose:

Eitrig-nekrotisierende Nephritis mit intraläsionalen Bakterienkolonien (embolisch-metastatische Nephritis)



Um welchen Erreger handelt es sich?

00

1 - Streptococcus zooepidemicus

2 - Actinobacillus equuli

3 - Escherichia coli

4 - Staphylococcus aureus

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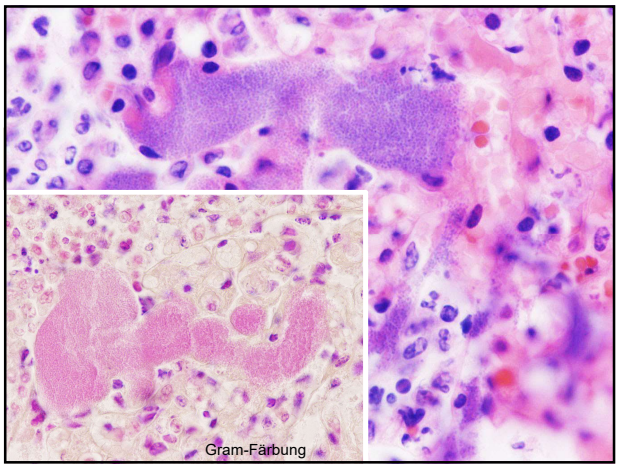

Actinobacillus equuli

	A. equuli subsp. haemolyticus	*A. equuli subsp. equuli*
Fohlen (< 6 Monate)	Septikämie • Pneumonie • Hepatitis • Omphalitis • Peritonitis • Nekrose lymphatischer Organe	Septikämie • Nephritis • Hepatitis • Adrenalitis • Pneumonie • Synovialitis • Omphalitis • Nekrose lymphatischer Organe
Adulte Pferde (> 2 Jahre)	Septikämie • Nephritis • Pneumonie • Enteritis • Peritonitis • Orchitis	Septikämie • Nephritis • Perikarditis/Endokarditis • Pneumonie • Hepatitis • Meningoenzephalitis • Pleuritis/Peritonitis • Nekrose lymphatischer Organe

Layman et al., *Journal of Veterinary Diagnostic Investigation*, 2014

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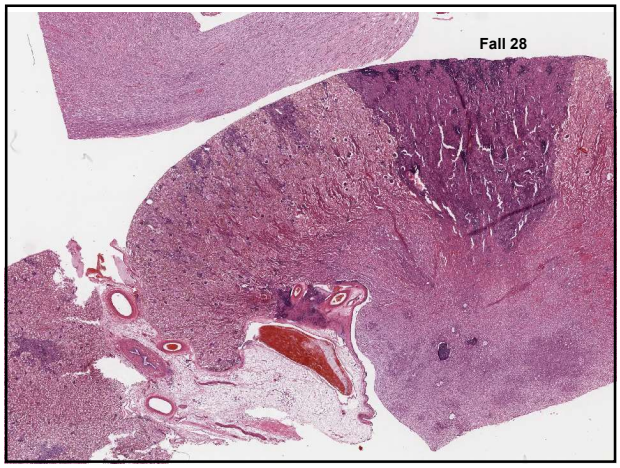

Fall 28 – Katze

- Katze, 8 Monate

Vorbericht: Wundheilungsstörungen nach Kastration, persistierendes Fieber

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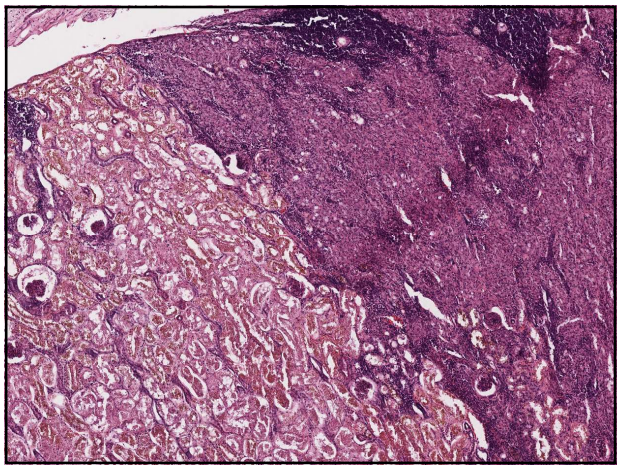
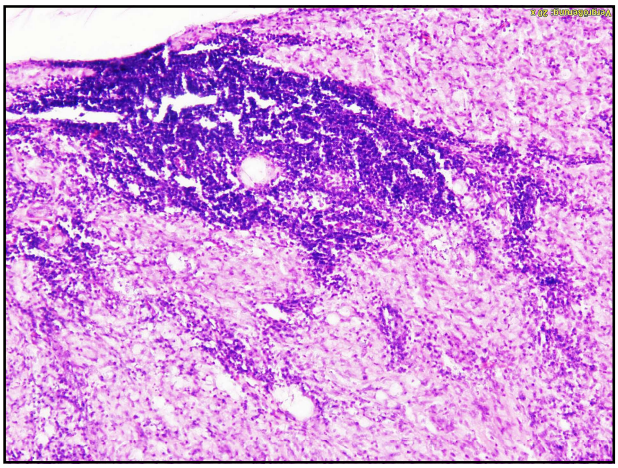
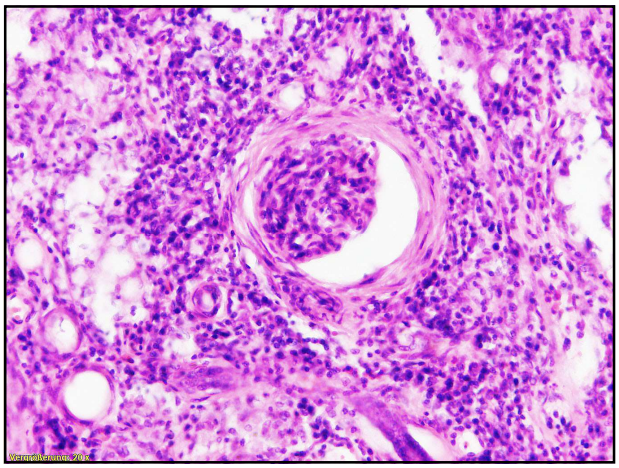
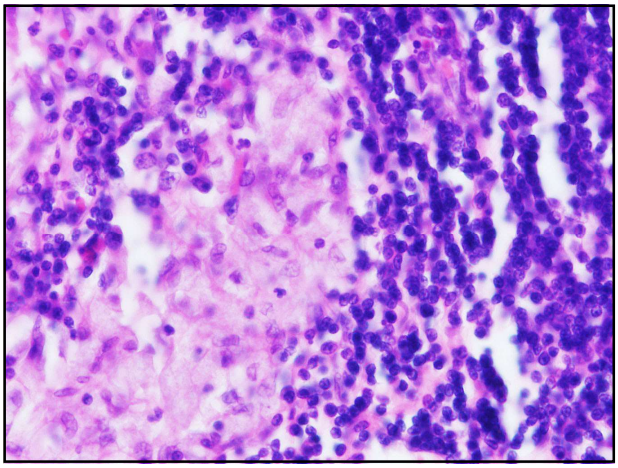








Um welches Krankheitsbild handelt es sich?

00

1 - Mykobakteriose

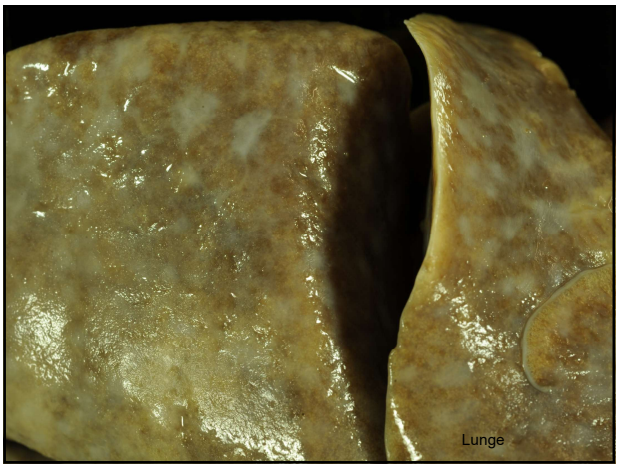
2 - Feline Infektiöse Peritonitis

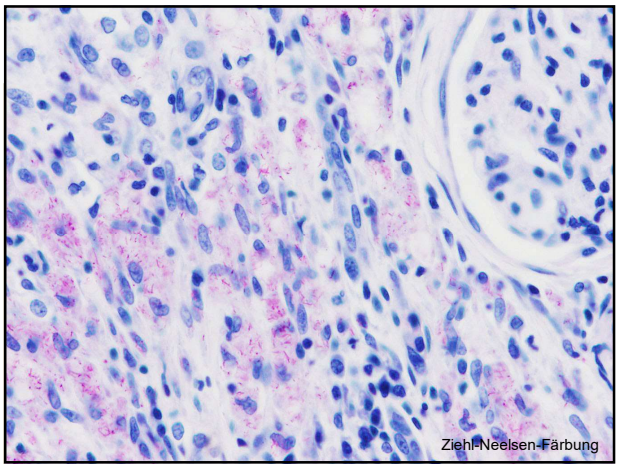
3 - Feline Leukämie

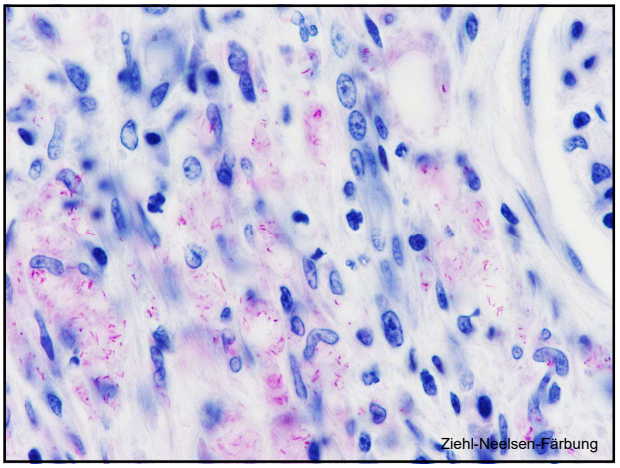
4 - Blastomykose

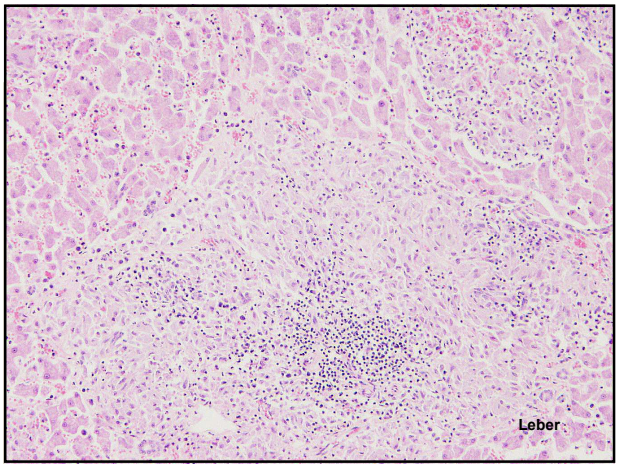
Morphologische Diagnose:
Granulomatöse Nephritis

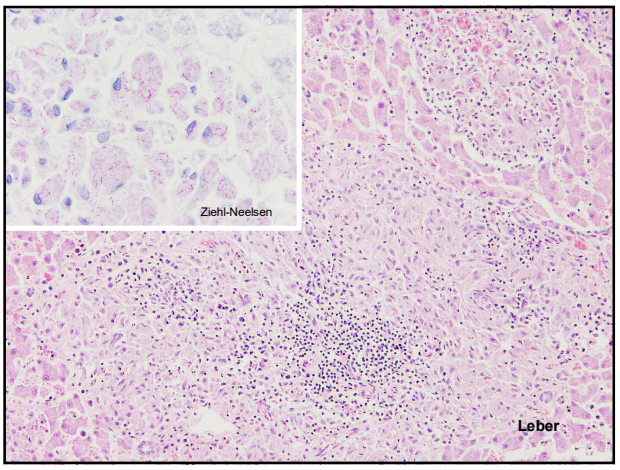
Organ	Befunde
• Lunge • Leber • Milz • Nebennieren • Gehirn • Darm • Lymphknoten • Muskulatur • Knochenmark	Granulomatöse Entzündung

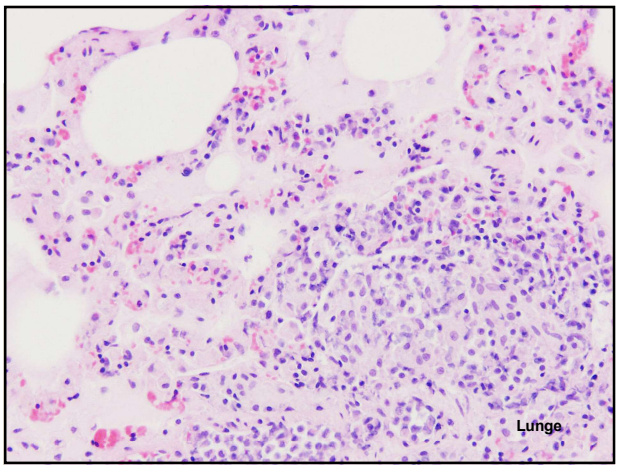

Lunge

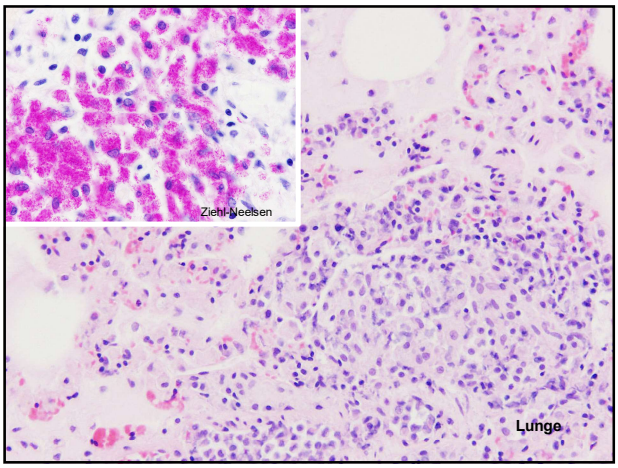

Ziehl-Neelsen-Färbung


Ziehl-Neelsen-Färbung


Leber


Ziehl-Neelsen
Leber


Lunge



Mykobakteriosen der Katze

	Erreger	Prädisposition	Betroffene Organe
Feline Tuberkulose	*M. bovis*, *M. microti*, *M. tuberculosis* (selten)	Kater, Freigänger	Haut, seltener Darm und/oder Lunge; disseminierte Form
Feline Lepra	*M. lepramurium*	Kater, Freigänger; Immunsuppression (z.B. Nierenerkrankungen, FIV)	Haut (Alopezie, Ulzeration)
Infektion mit nicht-tuberkulösen Mykobakterien	*M. avium*, *M. fortuitum*, *M. chelonae*, u.a.	Immunsuppression (FeLV, FIV, Toxoplasmose, Medikamente); Adipositas; Rassedisposition (Siam, Abessinier, Somali)	Haut (Pannikulitis), seltener disseminierte Form

Gunn-Moore, *The Veterinary Journal*, 2014

Friedrich-Loeffler-Institut | Naumburger Str. 96 a | 07743 Jena

Institut für molekulare Pathogenese
Leiter: Professor Dr. Christian Menge

Labor: NRL Tuberkulose der Rinder
bearbeitet von: Dr. Stefanie Barth
Telefon: 03641 804-2270
Fax: 03641 804-2228
E-Mail: stefanie.barth@fli.de
Zeichen: [redacted]

Datum: 05.02.2019

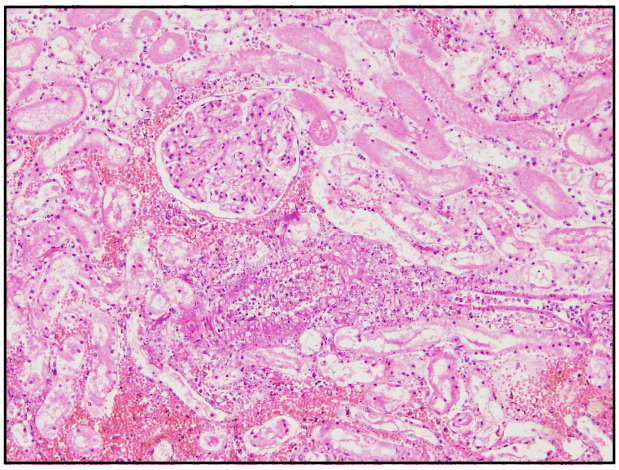
Prüfbericht (Abschlussbericht; unsere Tagebuch-Nr. [redacted])

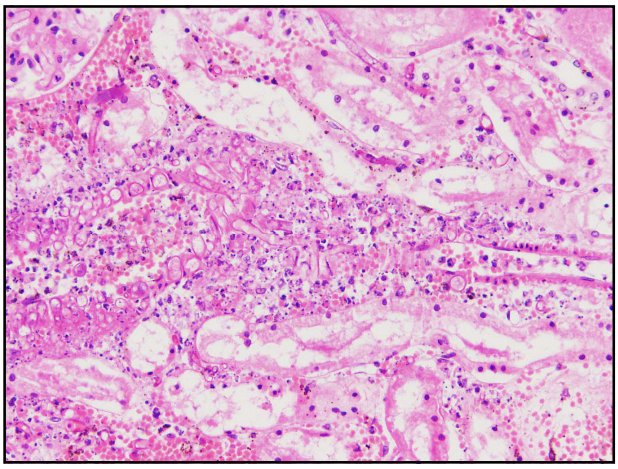
Seitenzahl des Berichtes:	1
Prüflabor:	Nationales Referenzlabor für Tuberkulose der Rinder (*Mycobacterium bovis* und *Mycobacterium caprae*)
Name des Auftraggebers:	siehe oben
Bezeichnung des Untersuchungsmaterials:	Organmaterial von einer Katze Lunge - 19MA0001; mes. LK - 19MA0002; Niere - 19MA0003
Eingangsdatum des Untersuchungsmaterials:	03.01.2019
Untersuchungsdatum / -zeitraum:	03.-09.01.2019
Bezeichnung des Untersuchungsverfahrens:	Kulturelle Anzucht (LA220_M09), PCR (LA220_M27)
Abweichung vom Prüfverfahren:	keine
Ergebnisse:	In allen drei Organen war ***Mycobacterium avium* ssp. *hominissuis*** **(MAH)** nachweisbar.

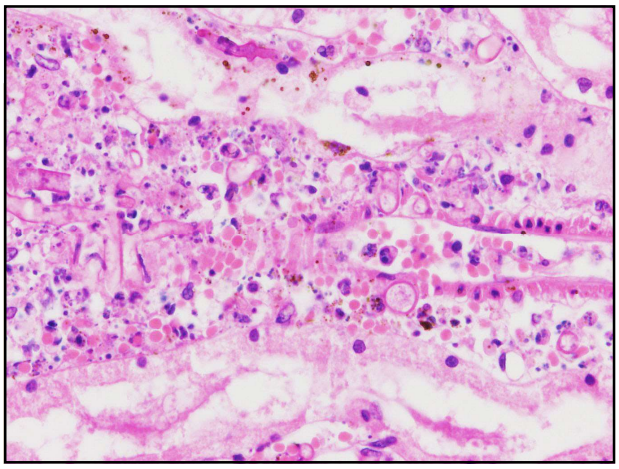
Fall 29 – Hund

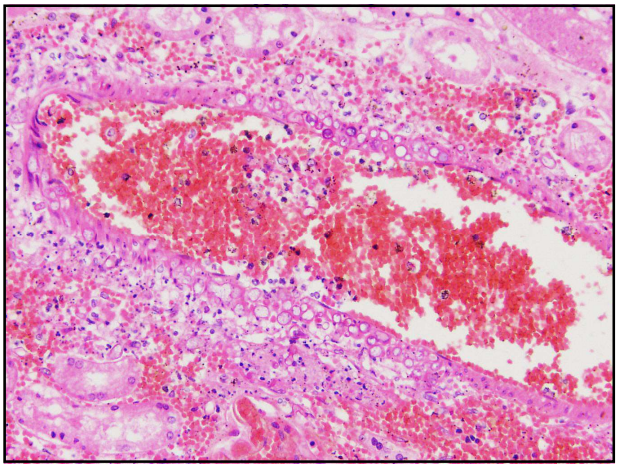
- Hund, 6 Jahre alt

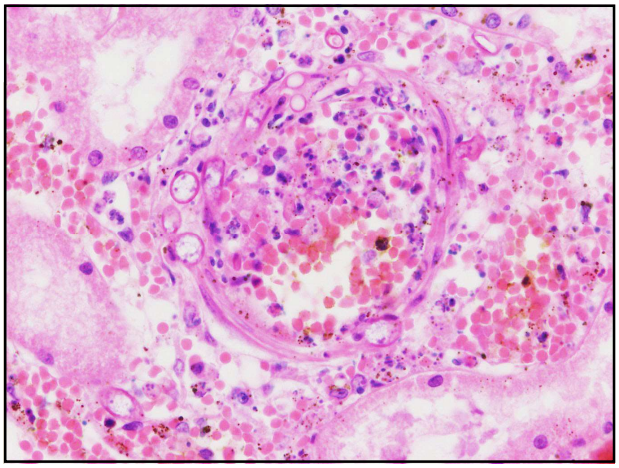
Vorbericht: Vomitus, Diarrhö, Inappetenz, Fieberschübe

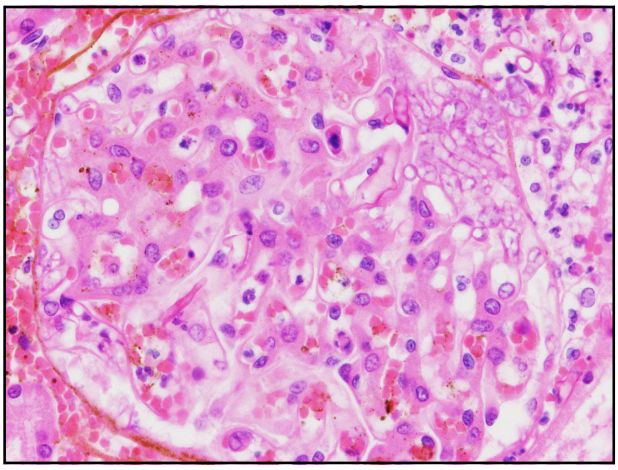


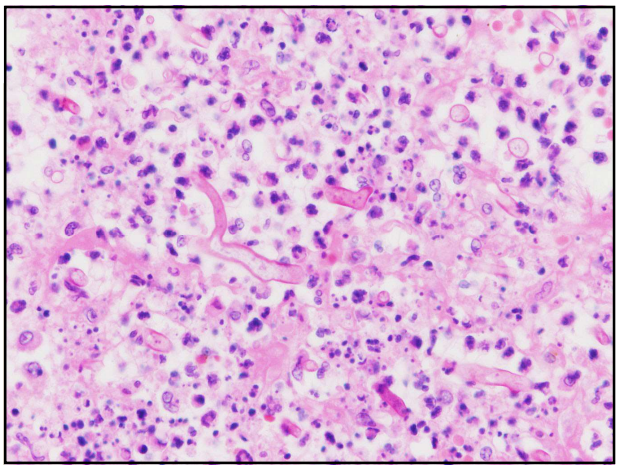


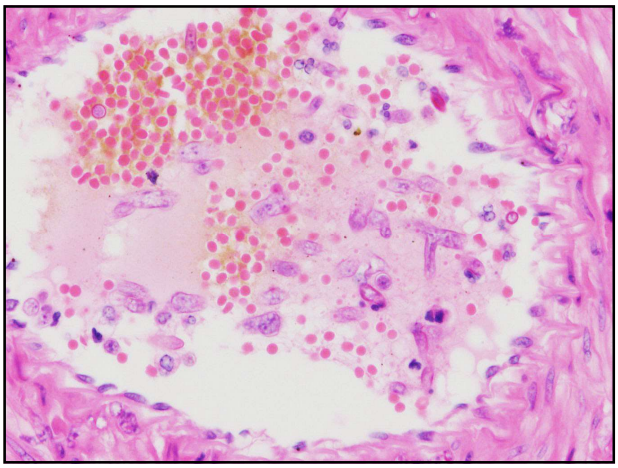












Fall 29 – Hund

Morphologische Diagnose:

Nekrotisierende Nephritis mit Vaskulitis und intraläsionen Pilzhyphen

Um welchen Pilz handelt es sich?

00

1 - Agaricus campestris

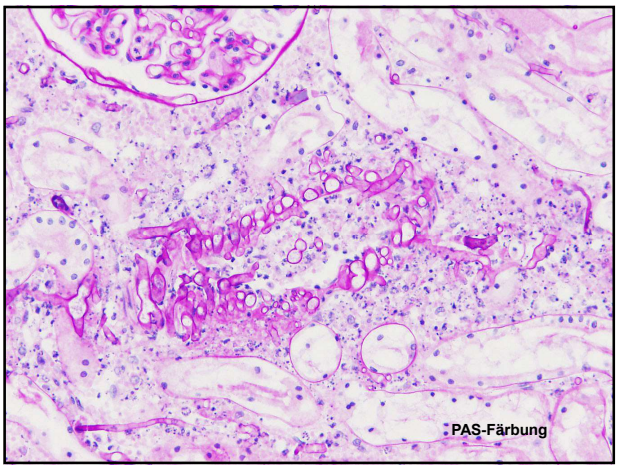
2 - Aspergillus spp.

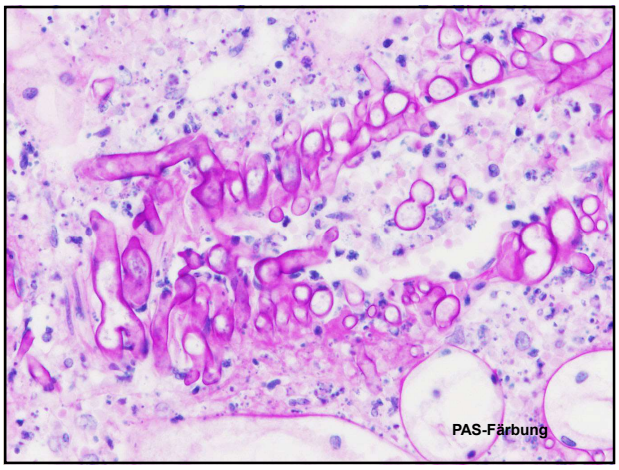
3 - Candida albicans

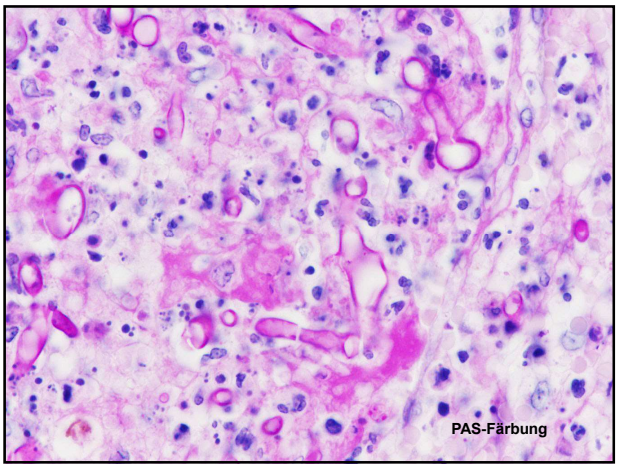
4 - Mucor spp.

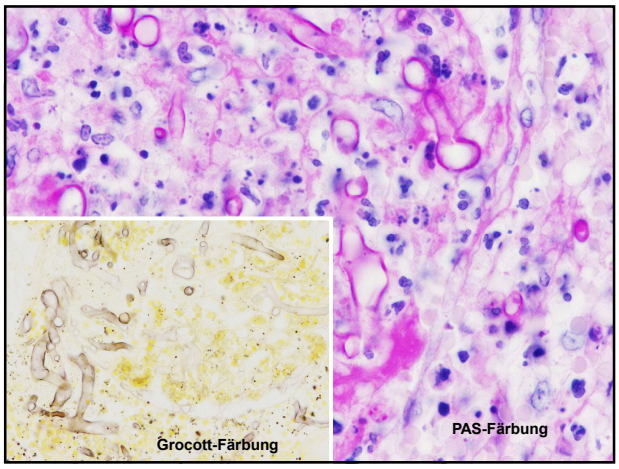
Fall 29 – Hund

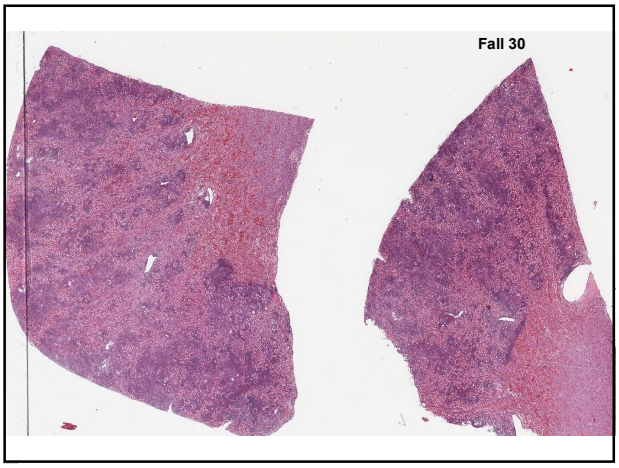
Aspergillus spp.	*Mucor spp.*
• Gefäßinvasion • Nekrosen	• Gefäßinvasion • Nekrosen und Thromben/Infarkte
• Dünne Hyphen (3-12 µm) • Septen • Dichotome Verzweigung, 45° • PAS- und Grocott-positiv	• Breite Hyphen (5-20 µm) • Wenig septiert • Rechtwinklige Verzweigung, 90° • PAS- und Grocott-positiv











Fall 30 – Rind

- Rind, 5,7 Jahre alt

Vorbericht: Fieber, Hautveränderungen, Inappetenz, Bestandsproblem

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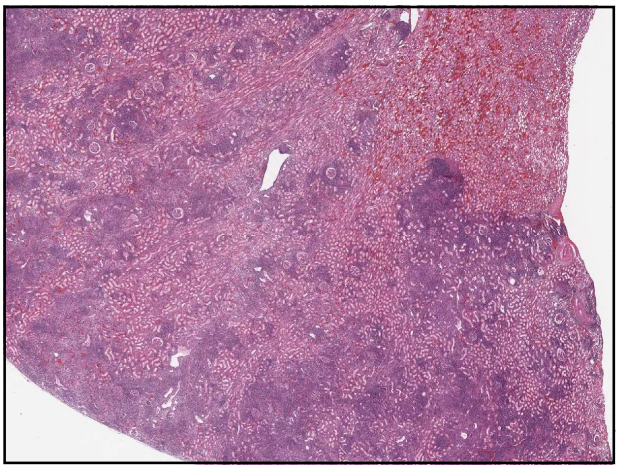

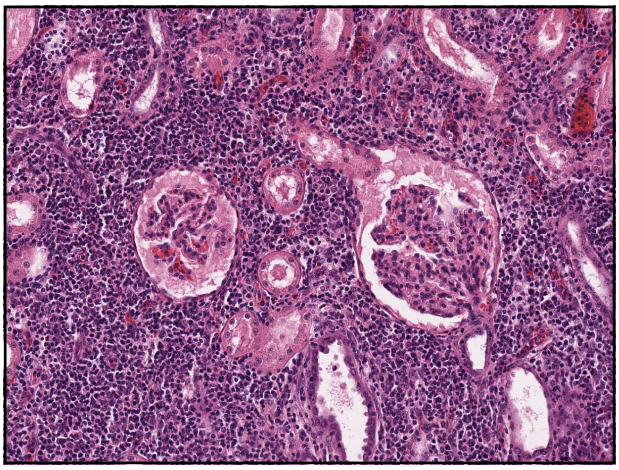

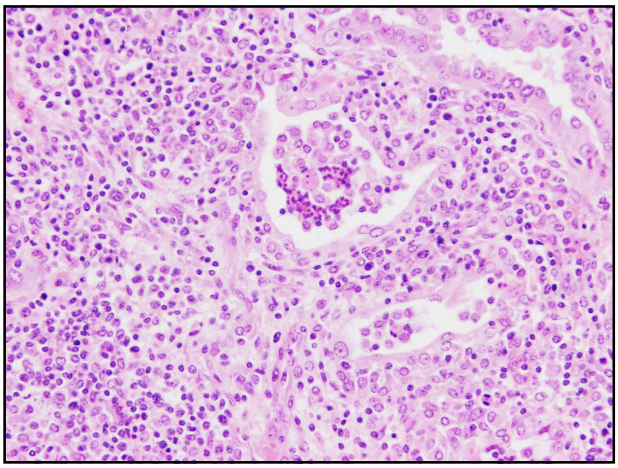

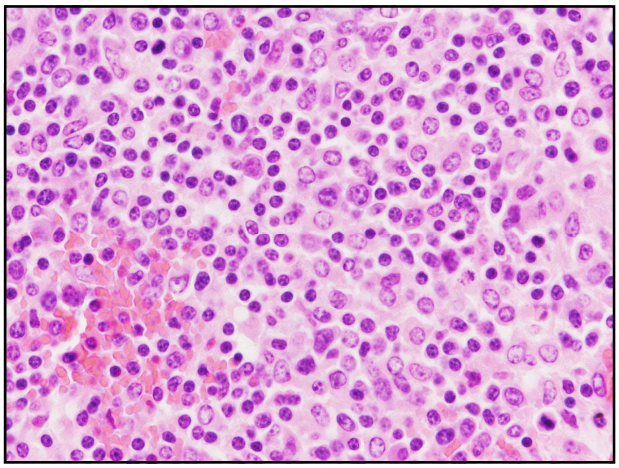

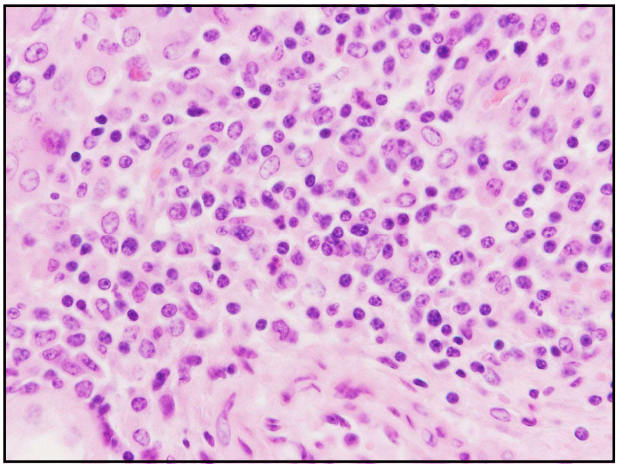

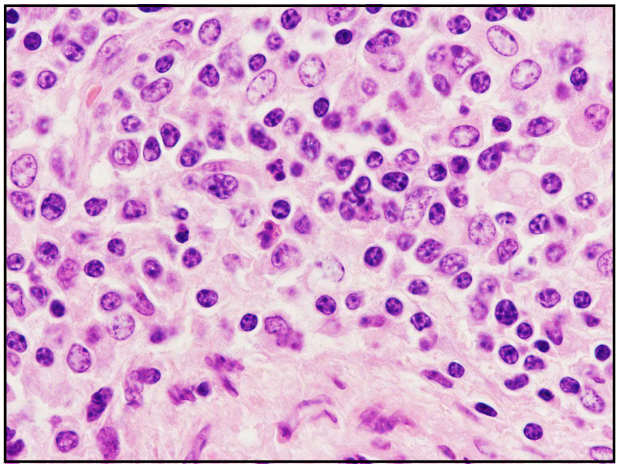

Um welche Krankheit handelt es sich?

00

1 - Hairy vetch-Vergiftung

2 - Typ IV Überempfindlichkeitsreaktion

3 - Bovine Leukose

4 - Jembrana disease

5 – Was ganz anderes

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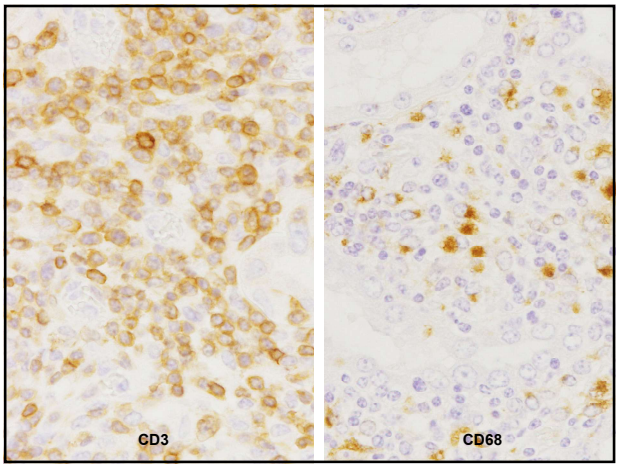

Fall 30 – Rind

Morphologische Diagnose:

Lymphohistiozytäre interstitielle Nephritis mit lymphoblastoiden Zellen

Fall 30 – weitere Befunde

Organ	Histologischer Befunde
• Leber • Nieren • Milz • Lymphknoten • Schilddrüsen • Nebennieren • Muskulatur • Gehirn • Haut	Lymphohistiozytäre Entzündung mit lymphoblastoiden Zellen und eosinophilen Granulozyten

Fall 30 – *hairy vetch toxicosis*

An Outbreak of Systemic Granulomatous Disease in Cows with High Milk Yields

Ayako IIZUKA[1], Makoto HARITANI[2]*, Mitsuo SHIONO[1], Mitsuo SATO[3], Osamu FUKUDA[3], Atsuko HAGIWARA[3], Shigeru MIYAZAKI[2], Nobuhiko TANIMURA[2], Kumiko KIMURA[2], Kyoko NAKAZAWA[2], Masaru KOBAYASHI[2], Takashi TAKAHASHI[1], Toshiya SAITO[1] and Katsuhiko FUKAI[1]

[1]Tochigi Prefectural Ken-oh Livestock Hygiene Service Center, Utsunomiya, Tochigi 321–0905, [2]National Institute of Animal Health, Tsukuba, Ibaraki 305–0856 and [3]Tochigi Prefectural Ken-hoku Livestock Hygiene Service Center, Nasu, Tochigi 329–2713, Japan

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ABSTRACT. Seven of 92 lactating Holstein cows on a dairy farm developed urticaria with alopecia and decreased milk production, and three of the seven died over the course of 7 to 18 days. Pathologic examination of the three cows, including the two dead and one euthanized cow, revealed that the skin, liver, spleen, kidneys, heart, salivary glands, pancreas, adrenal glands, mammary glands, lymph nodes, and trigeminal ganglia had lymphocytic to lymphogranulomatous inflammation. Inflammation predominated by lymphocytic infiltration was prominent in the heart, pancreas, mammary glands, adrenal gland, and trigeminal ganglia. Severe granulomatous inflammation with multinucleated giant cells was present in the spleen and kidneys. These lesions and their distributions were most similar to those seen in suspected cases of citrus pulp toxicosis and hairy vetch toxicosis. The outbreak of this disease resolved with the elimination of Citrus pulp from the feed. Immunohistochemical detection of lymphocytes and macrophage markers confirmed dramatic hyperplasia of CD3-positive T lymphocytes in these lesions. This strongly suggested that a type 4 hypersensitivity reaction played a role in the development of the lesions.

KEY WORDS: alopecia, dairy cow, lymphogranuloma, type 4 hypersensitivity reaction, urticaria.

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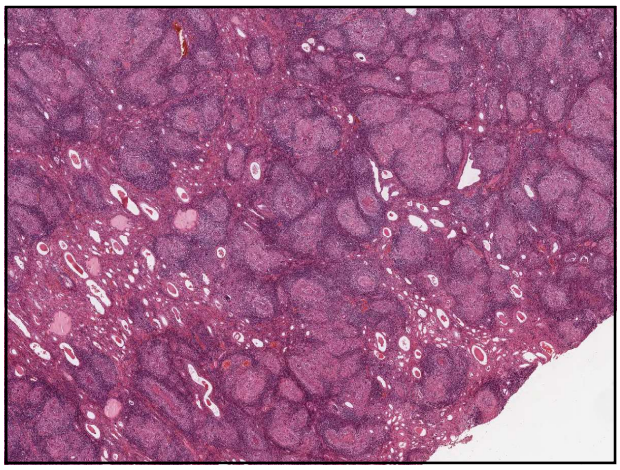
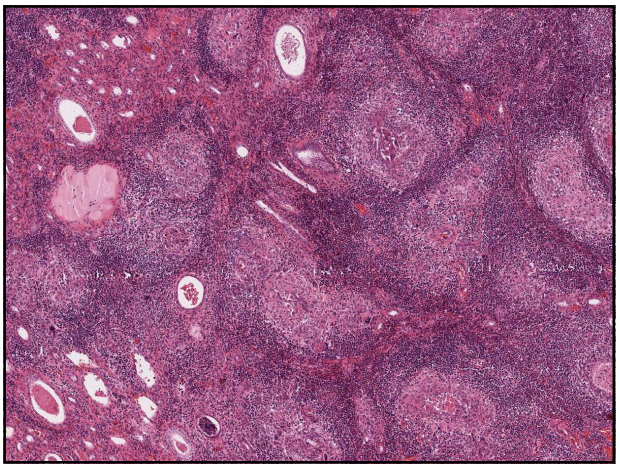
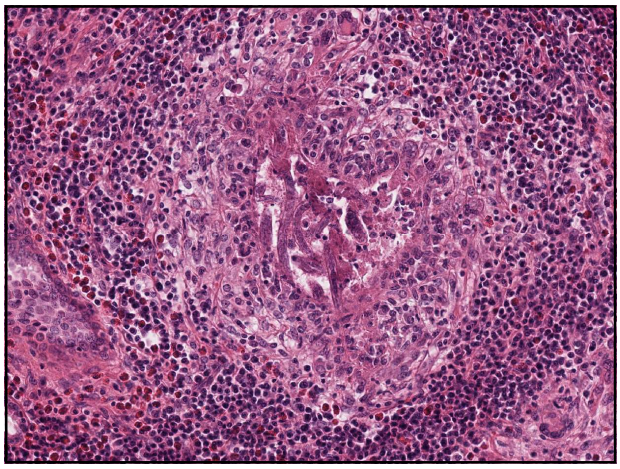
Fall 31 – Pferd

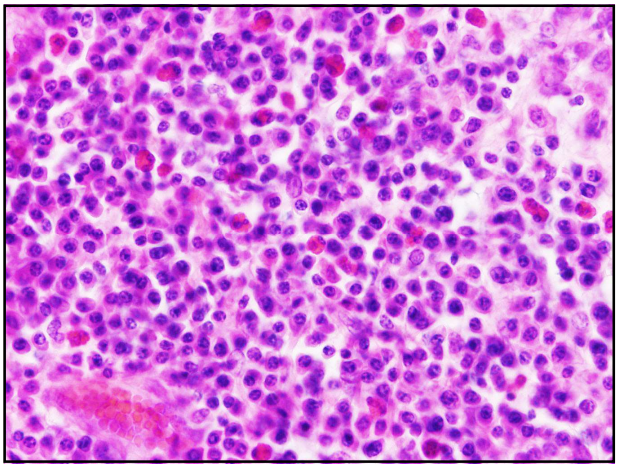
- Pferd, 12 Jahre alt

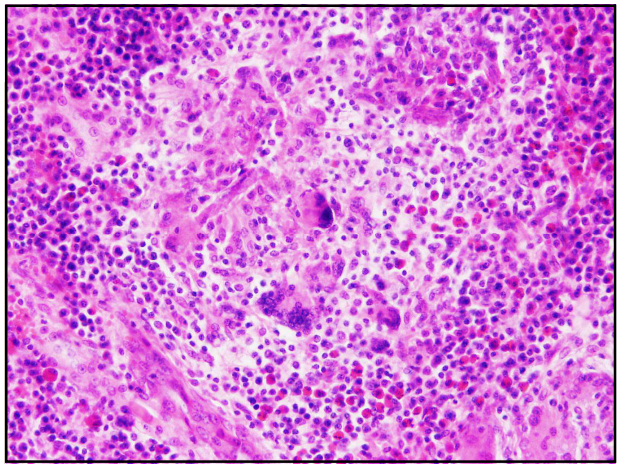
Vorbericht: blutiger Harn, Anämie

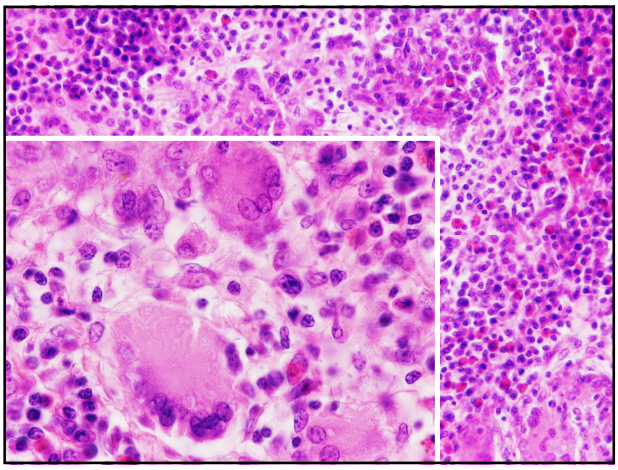


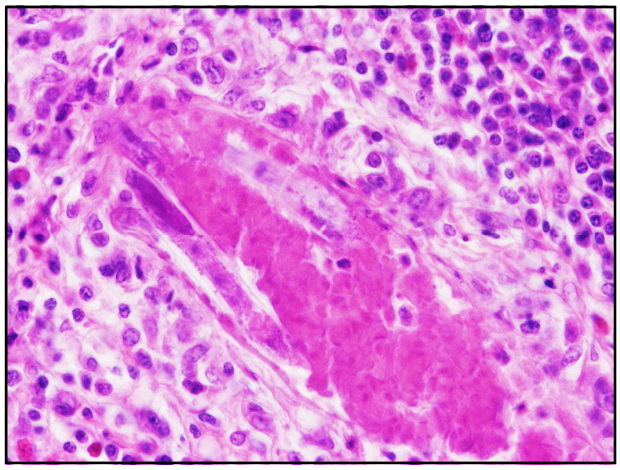






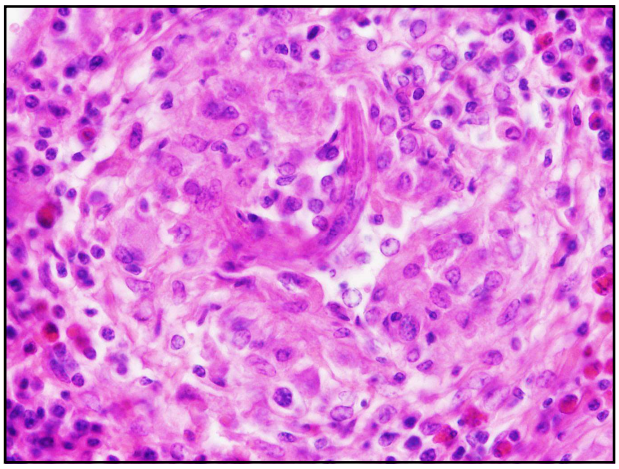


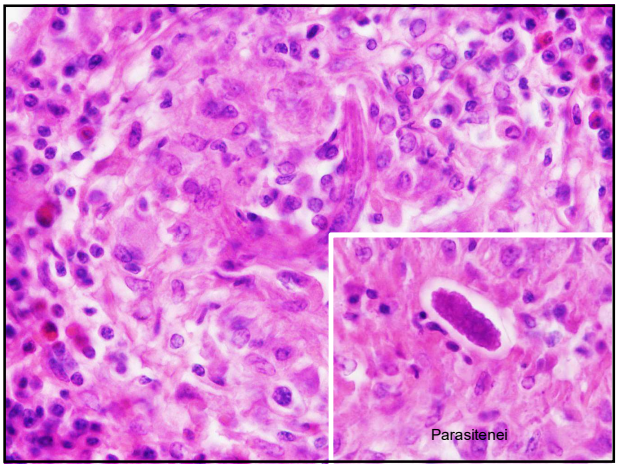


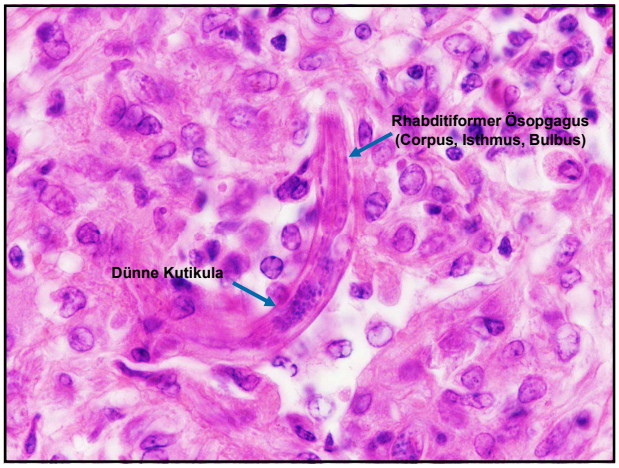


Fall 31 – Pferd

Morphologische Diagnose:
Granulomatöse Nephritis mit intraläsionalen metazoären Parasiten







Halicephalobus gingivalis

- Freilebende Nematode; fakultativ pathogen
- Pferd, Mensch (selten)
- Granulomatöse Entzündung (Mund/Nasenhöhle, Niere, ZNS)