

Procalcitonin immunohistochemistry can be used as a diagnostic tool in the post-mortem diagnosis of sepsis in dogs



Evaluation of procalcitonin immunohistochemistry as a post-mortem diagnostic marker for sepsis in dogs



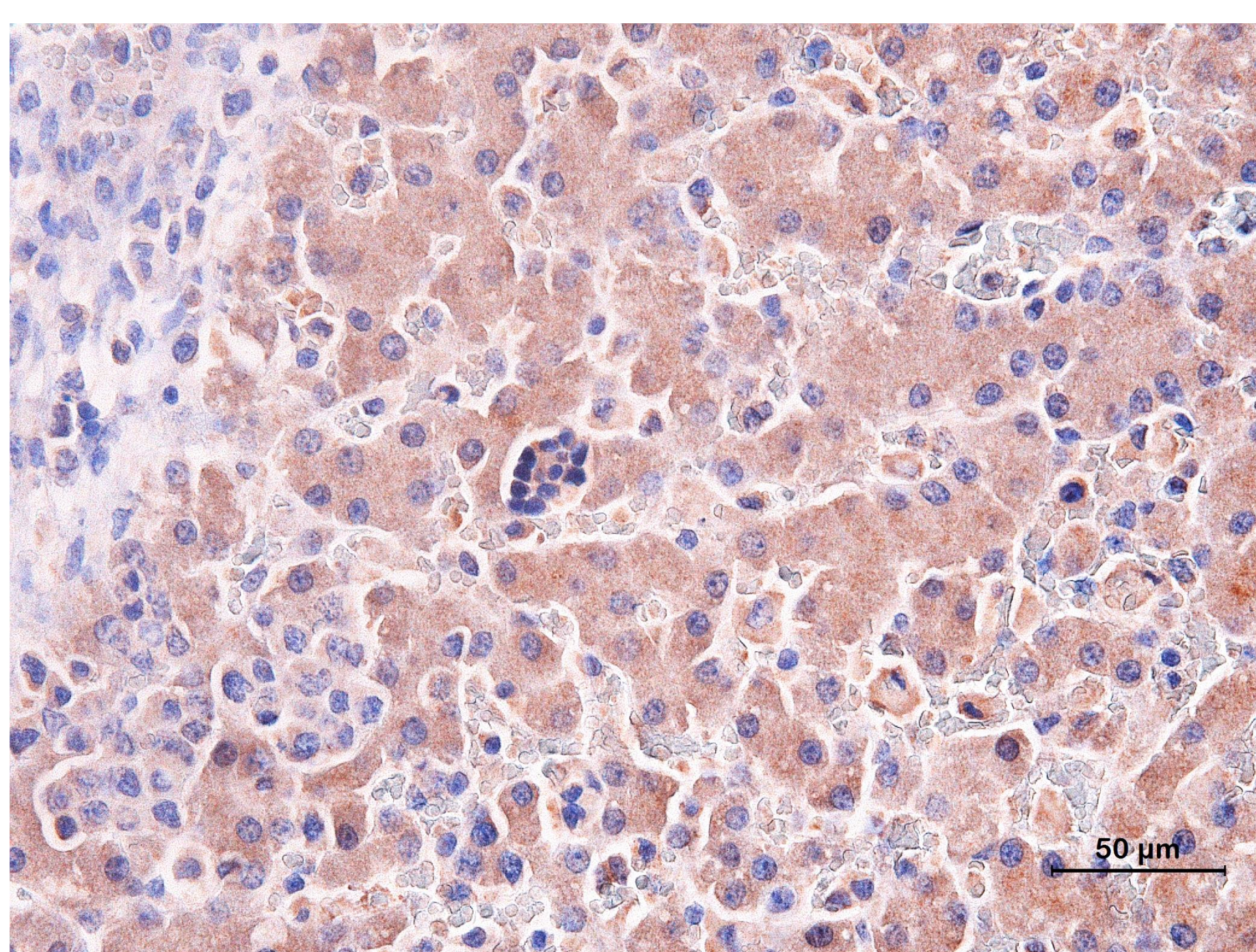
B. De Jonge and K. Chiers

Introduction

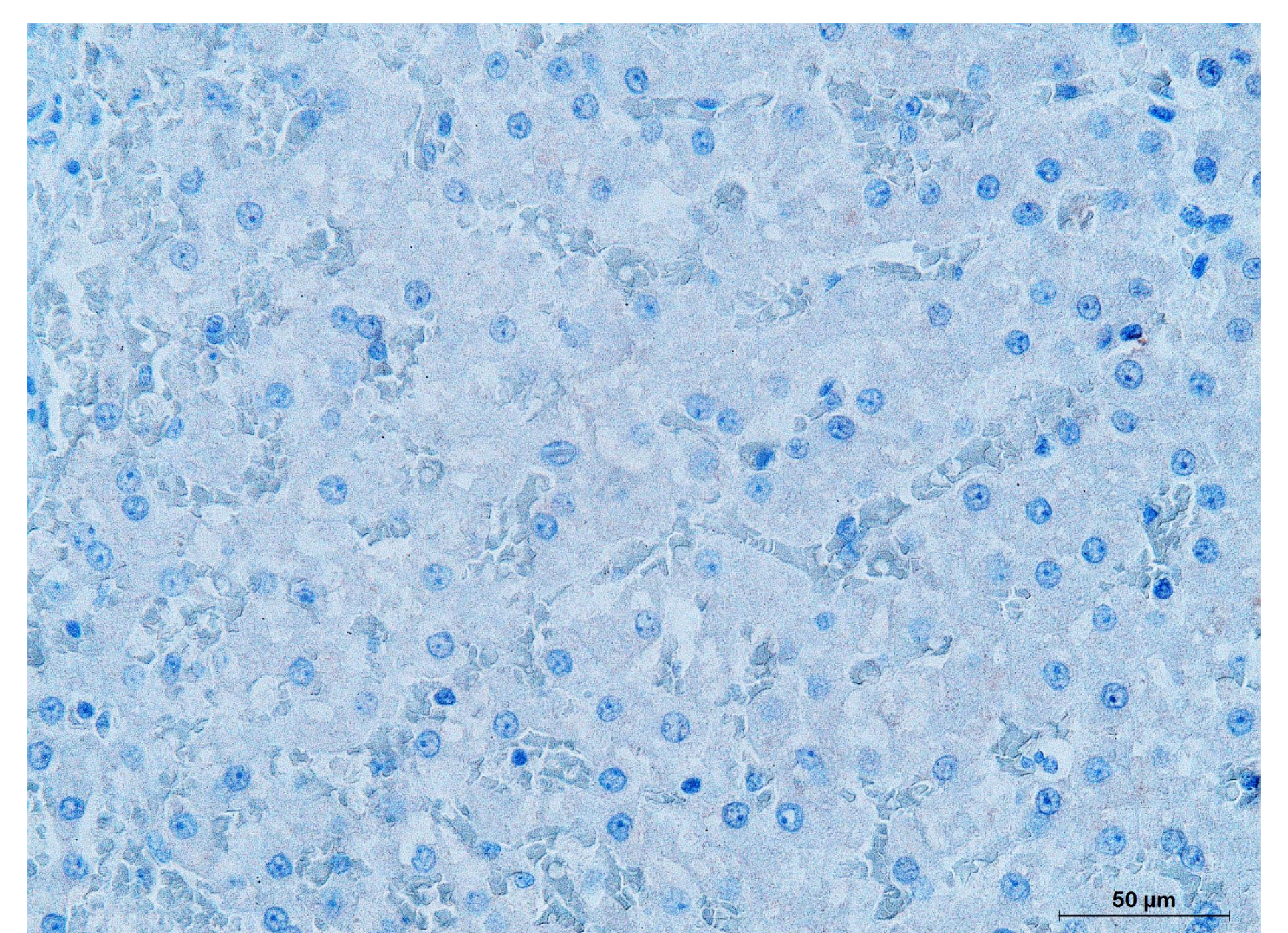
- Sepsis is defined as systemic inflammatory response syndrome (SIRS) secondary to infection
- Post-mortem diagnosis of sepsis is often difficult, when gross and histological lesions are not convincing.
- Procalcitonin is a biomarker for sepsis

M&M

- Case-control study:
 - Cases ($n = 8$): dogs with sepsis diagnosed based on histological detection of multiorgan suppuration with intralesional bacteria
 - Controls ($n = 12$): dogs with death due to pancreatitis or massive hepatic necrosis (non-infectious SIRS, $n = 8$), dogs which died from acute trauma (no SIRS, $n = 4$)
- Procalcitonin immunohistochemistry on lung, liver and kidney.



Liver, dog, sepsis - Procalcitonin IHC



Liver, dog, pancreatitis (SIRS) - Procalcitonin IHC

Results

- Only liver showed promising results
- 75% sensitivity
- 81,1% specificity (71,4% for cases compared to non-infectious SIRS)

Conclusions

- Results indicate that procalcitonin immunohistochemistry can be used as a diagnostic tool in the post-mortem diagnosis of sepsis

Bert De Jonge
Bert.dejonge@ugent.be

