

## Symmetric dimethylarginine (SDMA) to identify renal injury in bitches affected by cystic endometrial hyperplasia – pyometra complex

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### INTRODUCTION

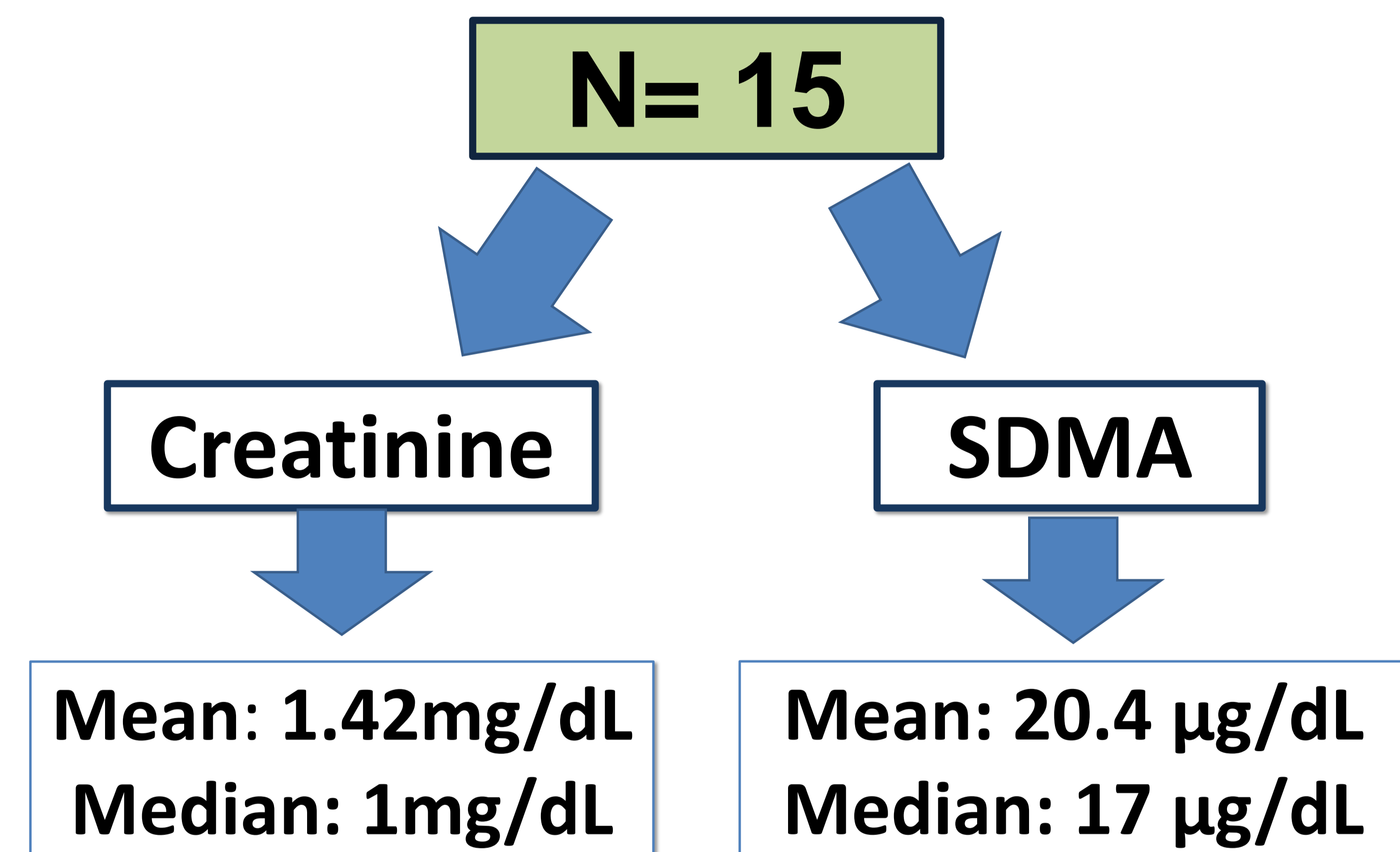
Cystic endometrial hyperplasia (CEH)-pyometra complex is the uterine infection with intraluminal purulent secretion. It is an emergency that can lead to death of bitches due to its important systemic changes, mainly kidney injuries, which are the most common. Serum creatinine dosage is the standard test used in veterinary medicine, but it suffers non-renal influence and increase only after 75% loss of renal function. Symmetrical Dimethylarginine (SDMA) is a renal function biomarker capable to detect renal damage with 25 to 40% of renal functionality, being considered earlier and with less extra-renal interference than serum creatinine.

### MATERIAL AND METHODS

Bitch with pyometra



### RESULTS



Kidney biomarkers	Reference limits
Creatinine	0,5-1,5mg/dL
SDMA	0-14µg/dL

**3 bitches had creatinine above reference limits**

**10 bitches had SDMA above reference limits**

### CONCLUSION

With these findings it was possible to conclude that there is presence of acute kidney injury in patients affected by CEH – pyometra complex, which can be detected by SDMA, even in the bitch not showing azotemia.

This fact is important during the evaluation of renal alterations in patients with CEH – piometra complex.