

Case report

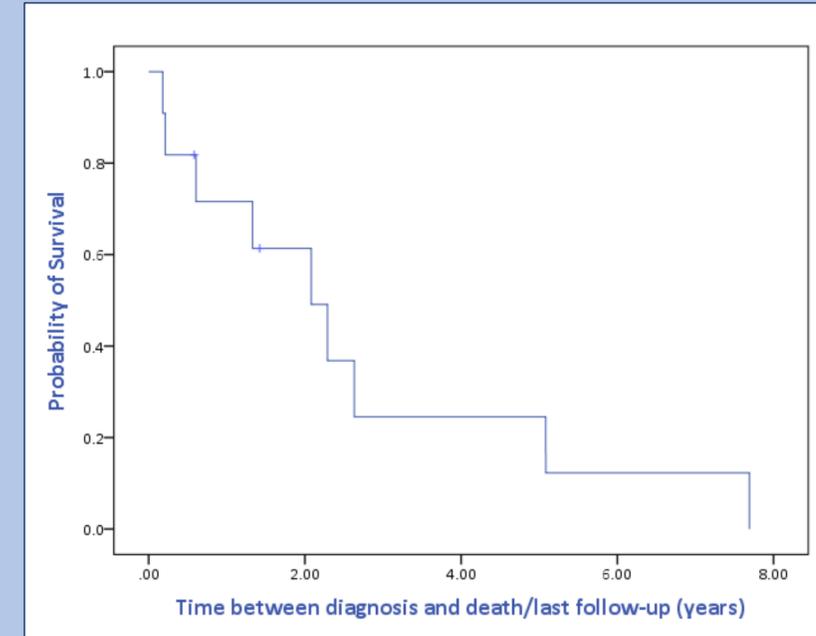
- An 85 year old lady presented with a rectal bleed and collapse.
- Background:** penicillin anaphylaxis, hypertension, recently resected anal tumour, metallic aortic and mitral valve (*in-situ* for 8 years).
- Admission blood cultures:** Negative after five days incubation.
- Pyrexia on day 2:**
 - Two sets of blood cultures grew *Pasteurella multocida* in both aerobic and anaerobic bottles.
- Identification confirmed by MALDI-TOF, log (score) value 2.218.
- Transoesophageal echocardiogram:** mitral valve vegetation.
- There was **no history of animal contact** for at least 6 weeks before admission.
- She had been regularly seeing her daughter's dog prior to this, though she did not recall ever being bitten or licked by the dog.
- MIC to **ciprofloxacin** was 0.008, and she was treated for 6 weeks (750mg BD).
- The patient had a good clinical and microbiologic response, with negative blood cultures after 48 hours of therapy.
- Two months after the diagnosis of endocarditis, she succumbed to hospital-acquired pneumonia.
- We performed a chart review to identify similar cases from our institutions.

Case series: all *Pasteurella multocida* isolates from sterile sites in our institutions over the last 15 years (n = 13)

Female, n	5	
Age, years, median (range)	63 (32–85)	
Participants with metallic prosthetic valves, n	2	
Presentation, n	SSTI with bacteraemia	5
	Isolated bacteraemia	3
	Prosthetic valve endocarditis	2
	Pneumonia with bacteraemia	1
	CAPD peritonitis without bacteraemia	2
Documented animal contact within 6 weeks, n	Any contact	6 cats, 2 dogs
	Definite bite	2 (cat)
	Definite scratch	1 (cat)
	Definite lick	1 (dog)

Patients with *P multocida* bacteraemia (n = 11)

Comorbidities, n (many patients had >1 comorbidity)	Diabetes	4
	Malignancy	3
	Cirrhosis	2
	End-stage renal disease	2
	Unknown	2
Alive at time of follow-up, n	2	
Follow-up, years, median (IQR)	2.19 (0.58–2.63)	
Survival, years, median (95% CI)	2.08 (0.82–3.34)	
Sensitivities		
S: susceptible	Amoxicillin/penicillin	S R NT
R: Resistant	Ciprofloxacin	10 - 1
NT: not tested	Gentamicin	8 1 2
	Trimethoprim	5 1 5
		6 - 5



Discussion

- This is the fifth case of metallic prosthetic valve endocarditis caused by *Pasteurella* spp to be reported (with a sixth identified on chart review).¹⁻⁴
- Native valve endocarditis is similarly rare.⁵
- A history of animal contact is not always forthcoming.
- In cases of penicillin allergy, therapy should be guided by susceptibility results.
- In this case, ciprofloxacin resulted in a good microbiological outcome.
- Pasteurella* bacteraemia is associated with underlying co-morbidities.
- The relatively high medium-term mortality suggests that *Pasteurella* bacteraemia is a marker of risk.
- We recommend transoesophageal echocardiography in all patients with *Pasteurella* bacteraemia and risk factors for endocarditis.