Aeroccocus Urinae: An Increasingly Common Virulent Pathogen

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Abstract

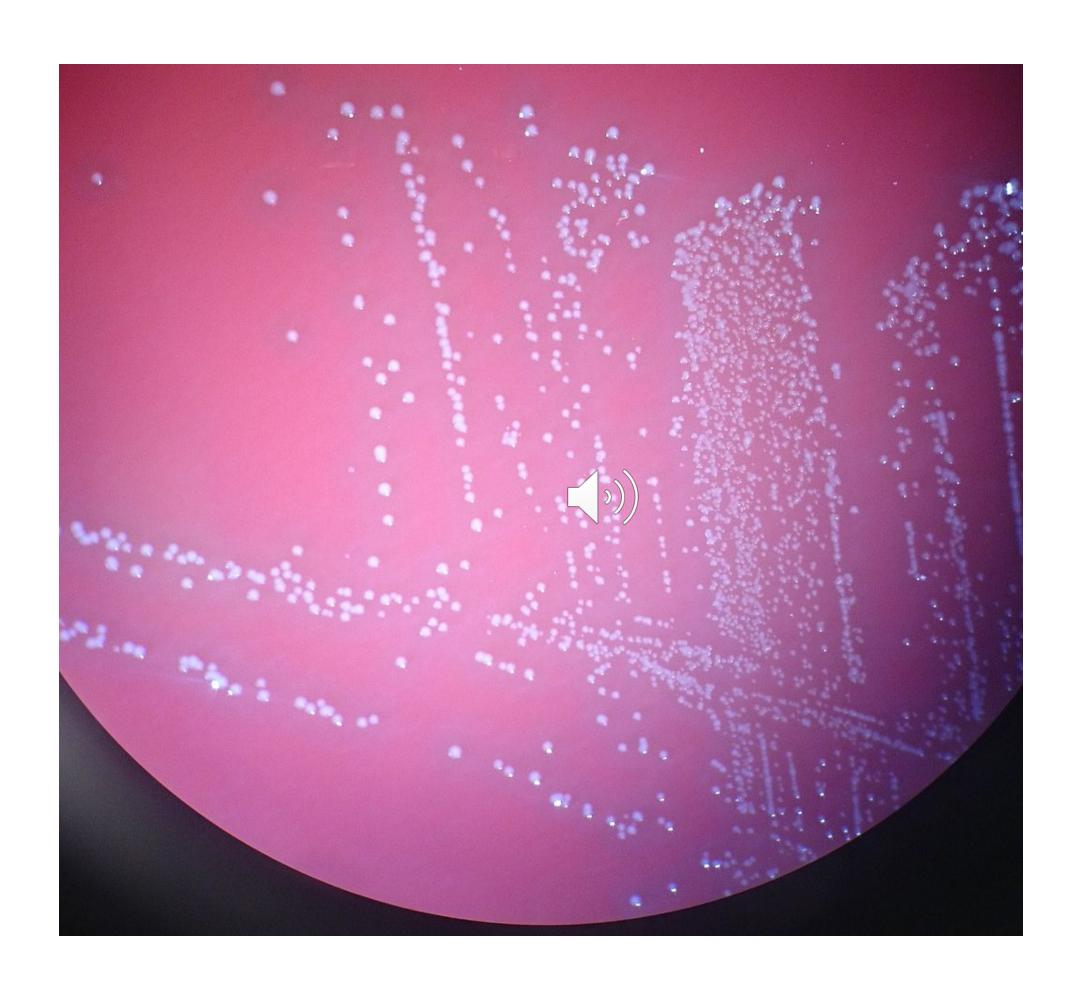
Aeroccocus urinae is a gram-positive, catalase-negative coccus that is often under-reported due to its misidentification as streptococci or staphylococci, but is a virulent pathogen that can lead to endocarditis. This report details a 67 year old male with complicating factors of previous urinary tract disease and a history of coronary artery bypass graft who had a delay in treatment of aeroccocus urinae leading to endocarditis, urosepsis and ultimately death. In addition to recognizing the virulence of this pathogen, primary care physicians should understand appropriate antibiotic treatment, the common patient population and the risk factors that can help predict severe infection.

Identification

- Aeroccocus Urinae is a gram positive, catalase positive bacteria.
- Often mis-identified as streptococci and staphylocci.
- Requires biochemical testing (hydrolysis of various sugars) that is timely and not always available.

Risk Factors

Men >70 years old
Underlying urinary pathologies
(BPH, prostate/penile cancer, indwelling catheters)



Treatment

- Sensitive to penicillin and cephalosporins
- Penicillin and Gentamicin
 effective in Infective Endocarditis
- Tetracycline, Erythromycin, Clindamycin and Rifampacin rarely used.

Case

67 y.o. male with a PMHx significant for DM, BPH, HTN, CAD s/p CABG, dyslipidemia, and nephrolithiasis who was admitted for sepsis with initial concern for pulmonary source. Found to have Enterococcus bacteremia suggestive of urinary source complicated by endocarditis.

Hospitalization complicated by acute acalculous cholecystitis and cardiac instability. Ultimately transferred to the MICU with PEA arrest resulting in death.

References

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