Variations in the clinical spectrum of the *Streptococcus anginosus* group: a report of two rare presentations

Carlos M. Zapata, Harold A. Matos-Casano, Jilan Shah, Utpal Bhatt

Wyckoff Heights Medical Center, Brooklyn, NY, USA

Background

The Streptococcus Anginosus Group (SAG) formerly Streptococcus Milleri Group is a subgroup of viridans streptococci including S. anginosus, intermedius, and constellatus. SAG are microaerophilic digestive tract commensals. They are associated with empyema and deep organ abscesses. We present 2 unusual cases: necrotizing fasciitis and aortic valve endocarditis with aortic root abscess, resulting in septic emboli causing renal infarction.

Case #1

48 year-old-male with history of HTN, T2DM, presented with swelling and erythema of the right arm of 2-day evolution. Exam: tender, erythematous indurated right deltoid. Significant labs: WBC 25k/uL and lactate of 2.5. CT of the RUE showed an extensive fluid collection.(Image 1) Vancomycin, levofloxacin and clindamycin were initiated, surgical debridement revealed extensive necrotizing fasciitis. (Image 2) Wound cultures grew S. constellatus. Required multiple debridement and prolonged course of penicillin G.

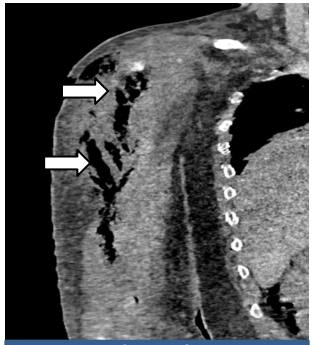

Image 1

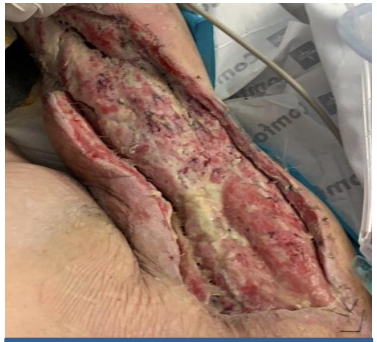

Image 2

Case #2

53-year-old male with history of COPD, Prior Splenectomy for a large splenic infarct, heterozygous factor V Leiden mutation, HCV infection, cirrhosis, presented with right flank pain, hematuria over 5 days. Labs: WBC 16.8 k/uL, CT abdomen with contrast: right renal infarct. (Image 3) Heparin drip, Vancomycin and Ceftriaxone were initiated. Blood cultures grew S. anginosus. TEE revealed new aortic valve vegetations with severe aortic regurgitation. His condition deteriorated, requiring aortic valve surgery, found to have aortic root abscess requiring aortic root replacement.

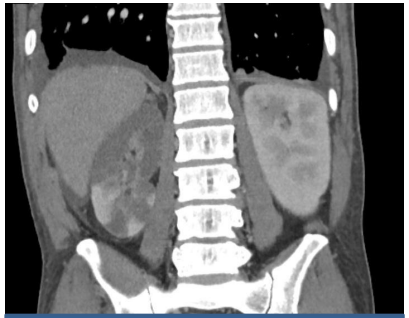

Image 3

Conclusions

SAG infections are unique from other S viridans, causing severe deep organ abscesses requiring combined surgical and antibiotic therapy. Isolation in clinical specimens should alert the possibility of severe life threatening infections. Here we highlight 2 unusual manifestations of necrotizing fasciitis and aortic valve endocarditis with aortic root abscess and possible large septic renal embolism. One patient had a splenectomy. We are not sure if this contributed to a severe SAG infection.

Contact

Name: Carlos M Zapata
E-mail: czapatamd@gmail.com
Phone number: 3474303261

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