Rothia spp. are gram positive bacteria which are known to cause infections in the immune compromised host. Literature is limited on the epidemiology and clinical significance of Rothia bacteremia.

**METHODS**

We reviewed medical records of all patients with blood cultures positive from 2006-2014. Descriptive analysis was performed as well as comparative analysis of neutropenic patients (absolute neutrophil count ≤ 1000/µL) at the time of bacteremia with non-neutropenic patients at the time of bacteremia. Fisher’s exact tests were used for comparisons of proportions and medians, respectively, with p-values <0.05 considered statistically significant.

**RESULTS**

29 patients with Rothia bacteremia were identified. Median age was 58 years (range 27-73), with no significant gender difference (p=0.94). Charlson co-morbidity score of 4 or greater was found in 20 (69%) of patients; 20 (69%) patients had a hematologic malignancy or bone marrow transplant. While there were 15 deaths, only 5 was possibly attributed to Rothia infection. Neutropenia was observed in 21 (72%) patients at the time of bacteremia. Neutropenic patients were less likely than non-neutropenic patients to have polymicrobial infection (24% vs. 63%, p=0.083); and were also more likely to have multiple positive blood cultures (76% vs. 0%; p-value <0.001) preceding infection.

**CONCLUSIONS**

- Rothia bacteremia is seen in patients with medical co-morbidities, predominantly in patients with leukopenia.
- A significant association was seen with prior use of steroidal and fluoroquinolone prophylaxis in neutropenic patients who developed Rothia bacteremia.
- Rothia bacteremia in neutropenic hosts was mostly monomicrobial and less likely thought to be a contaminant.

**REFERENCES**