vertebral osteomyelitis due to Candida is still rare and can be difficult to diagnosis and treat. We evaluated the incidence of vertebral osteomyelitis due to Candida species at our facility to try to identify risk factors and determine outcomes.

**Methods.** We used our electronic record databases to search for patients with a diagnosis of osteomyelitis, and a positive fungal culture. From 2006 to 2018 our hospital had 14 cases of proven Candida vertebral osteomyelitis.

**Results.** Candida albicans was the most frequently isolated organism, being cultured in 10/14 (71.4%) patients, followed by C. tropicalis (2/14), C. krusei (1/14), and C. parapsilosis (1/14). The two most common risk factors for infection were injection drug use (50%) and prior antibiotic use (35.7%). All patients were treated with caspofungin followed by fluconazole. Ten patients (71.4%) required surgery. Short-term outcomes were favorable with no deaths.

**Conclusion.** The incidence of vertebral osteomyelitis due to Candida may be increasing. In our state, injection drug use seems to be a factor in the increase in infections. We have seen a rise in injection drug use as prescription narcotics are becoming more difficult to obtain. Physicians must have a high index of suspicion for fungal disease when treating osteomyelitis in patients with these risk factors. Short-term outcomes seem favorable, but further studies are needed to evaluate long-term outcomes and to determine optimal management.

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301. The Use of Multiplex Touchdown PCR to Genotype Cutibacterium (Propionibacterium) acnes Isolated From Periprosthetic Shoulder Infections

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**Background.** Cutibacterium acnes is a frequent isolate in periprosthetic joint infections (PJI). Intravenous (IV) perfusion is the standard route of administration. The Subcutaneous (SC) route may present an interesting alternative in case of outpatient care or when IV perfusion is not possible. The aim of this study was to demonstrate that the SC route of administration for C. acnes provides effective serum concentrations in the treatment of BJI without route-specific side effects.

**Methods.** Descriptive analysis of a bi-center retrospective observational study from January 2011 to February 2017 in patients with a BJI treated with C. acnes SC administration. We considered 89 patients with a C. acnes plasma level dosage. Cemepem and Cimpen were considered optimal if they were superior to five MIC.

**Results.** Eleven patients were included with 21 dosages of cefepime SC, 12 dosages of cimpen and nine Cmin. The mean age of the patients was 58 ± 17 years and the mean body mass index was 26.6 ± 5.6. Cefepime was used for the management of infections with at least one Gram-negative bacillus (GNB) (64% of infections were polymicrobial). Combination with at least one other antibiotic was found in 68% of cases. The median Cmax and Cmin levels were 57 mg/L (39.5–124) and 14 mg/L (0–42), respectively. Cmax was above five MIC for all patient and Cmin was above this threshold in eight (80%) patients. C. acnes isolated from SC administration for C. acnes was present in all of the shoulder isolates, no phylogroup association was detected with clinical, laboratory and histopathologic correlates of infection. The assignment of a diagnosis of prosthetic joint infection (PJI) confirmed to the definition recommended by the IDSA Clinical Practice Guidelines of PJI.

**Conclusion.** Our results mirror those from a previous investigation using a less robust four gene MLST PCR-based scheme that showed a lack of phylogenetic association with shoulder PJI. Our results confirm the circulating C. acnes sequence type in our community.

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302. Role of Inflammatory Markers in Diagnosing Diabetic Foot Infection: A Meta-Analysis

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**Background.** Diabetic foot ulcers (DFUs) cause significant morbidity and put great economic burden on patient and healthcare facilities. Infection is the main driving force behind admissions related to DFU. Culture of soft tissue or bone is invaluable in diagnosing infection but is time consuming. Inflammatory markers such as leukocyte cyte sedimentation rate (ESR), C-reactive protein (CRP), and procalcitonin (PCT) are rapid, simple, and inexpensive laboratory tests that can aid in early diagnosis of diabetic foot infection (DFI) and monitor response to treatment. We did a meta-analysis to compare diagnostic performance of inflammatory markers for detecting DFI.

**Methods.** We searched PubMed, Embase, and Cochrane databases from their inception to December 2017. This meta-analysis was performed according to PRISMA guidelines. We included studies based on following inclusion criteria: (1) at least one of the inflammatory markers (ESR, CRP, PCT) was evaluated; (2) the markers including specificity, sensitivity, PPV, and NPV were measured as outcomes; and (3) sufficient data were available to construct 2 × 2 contingency table. We used bivariate random effect regression model to pool the sensitivity and specificity of the targeted biomarkers.

**Results.** We included 73 studies. Twelve studies met our inclusion criteria. Number of studies reporting data on each individual biomarker was as follows: 11 for ESR, seven for CRP, and five for PCT. Pooled sensitivity and specificity for ESR were calculated to be 0.84 (95% CI 0.76–0.92) and 0.89 (95% CI 0.73–0.98) with area under receiver operating characteristic curve (AUCROC) of 0.90 (95% CI 0.87–0.92). Pooled