

**P1645 High rate of failure and catheter removal after vancomycin lock therapy for totally implantable venous access port related infection due to coagulase-negative staphylococci in cancer patients**

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**Background:** In cancer patients, the totally implantable venous access port (TIVAP-RI) risk is of 0.20‰ catheter-days, coagulase-negative Staphylococci (CoNS) being the most common cause. Vancomycin lock therapy (VLT) is recommended for conservative treatment of TIVAP-RIs due to CoNS. The aim of this prospective, observational, multicenter study was to analyze the effectiveness of VLT in the treatment of TIVAP-RIs due to CoNS in cancer patients.

**Materials/methods:** TIVAP-RI was defined as fever associated with identical CoNS positive blood cultures (BC) (either 2 separate positive BC from TIVAP or 2 positive paired BC (TIVAP/peripheral vein) with a differential time to positivity longer than 2 h). The cumulative incidences of TIVAP-RI recurrence due to CoNS and of secondary infectious locations at 3 months were estimated and presented as estimate and 95% confidence interval (95%CI).

**Results:** Ninety six patients were included (54% males), median age was 63 years (53–71). Patients were treated for solid tumor in 75 (78 %) cases and for haematologic cancer in 21 (22%). Median duration of VLT was 12 days (IQR: 9 -14), using a median vancomycin concentration of 2 (2-5) mg/mL. A systemic antibiotic therapy active against CoNS was administered in 75 (87%) patients (vancomycin in 64 cases (85 %)). VLT was 24 hours/24 hours in 86 (91%) patients. TIVAP was reused after VLT in 59 patients (61.4%). The cumulative incidence estimate of TIVAP-RI recurrence due to CoNS at 3 months was 17.1 % (IC95% : 9.8% - 26.1%). The cumulative incidence estimate of secondary infectious locations to CoNS at 3 months was 3.5% (IC95% : 0.9 – 9.0%). TIVAP was removed in 30 (35%) patients. Among patients with a TIVAP culture performed (n=26) a positive culture yielding the same CoNS was observed in 13 (59%) and another bacteria in 3 (17%) cases. During the 3 months follow-up, 26 deaths were observed, 1 (4%) was related to TIVAP-RI.

**Conclusions:** VLT efficacy at 3 months in TIVAP-RIs due to CoNS in cancer patients was lower to what reported in the literature leading to TIVAP removal in 35% patients. Strategies to improve biofilm eradication should be evaluated.