“Osteomyelitis (OM) has rarely been reported in association with central venous catheter (CVC) use, but there are no reported data on the prevalence of OM in patients with intestinal failure (IF) with long term CVCs for parenteral nutrition (PN).” Allan et al (2014).

Reference:

Osteomyelitis in adult patients on long-term parenteral nutrition http://ctt.ec/djvAe+ @ivteam #ivteam

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Abstract:

INTRODUCTION: Osteomyelitis (OM) has rarely been reported in association with central venous catheter (CVC) use, but there are no reported data on the prevalence of OM in patients with intestinal failure (IF) with long term CVCs for parenteral nutrition (PN). We assessed period prevalence and characteristics of OM in adult patients on home PN.

METHODS: This was a retrospective study from a prospectively maintained database of patients referred to a national IF unit (IFU). Age, time on home PN, cultured organism (s) and
OM site were recorded. Patients were divided into 2 groups: OM occurring in the context of acute (Type 2) IF (AIF) or chronic (Type 3) IF (CIF). Statistical analysis was Student’s t-test.

RESULTS: 19 cases of OM occurred in 15 patients (6 male (40%)) between 2004-2013. There were 9 cases of OM in 9 patients with AIF, and 10 cases in 6 patients with CIF; the latter yielded a period prevalence for OM of 1.3% when compared to the 457 home PN (HPN) patients managed by the IFU over this period. There were no cases of OM in the preceding 9 years (1995-2004) at the IFU. Median (range) age at commencing PN was 66 (30-72) years in AIF compared to 64 (29-70) years in CIF and mean (95% CI) Charlson co-morbidity score was 3.7 (±2.5) in AIF compared to 2.2 (±0.9) in CIF. Patients with AIF had spent less time on PN before developing OM, compared to patients with CIF; despite this, the rate of CRBSIs was higher in the AIF than in the CIF group (see Table) as a result of patients with AIF contracting CRBSIs prior to specialised referral. Organisms and site of infection are shown in the table; identification of organism from the site of the OM successfully occurred in 3/9 (33%) cases in AIF and 3/10 (30%) cases in CIF, the remaining were identified via blood culture and aspiration of collections except one case where no organism was found, for which TB was suspected. All but one patient received at least 6 weeks antimicrobial chemotherapy; a further case required treatment for 3 months with antibiotics, 3 months with antifungals and 9 months with anti-TB medication. 4/10 (40%) AIF cases required operative stabilisation: 3 spinal and 1 above knee amputation. 2/10 (20%) CIF cases required operative stabilisation: 1 spinal and 1 pedal phalanx amputation. No patient died from OM. gutjnl;63/Suppl_1/A271-a/T1F1T1 Abstract PTH-135 Table 1 Characteristics of OM cases: CRBSI rate, site and microorganisms identified. (CRBSI=catheter related blood stream infection, OM=osteomyelitis, PN=parenteral nutrition)

CONCLUSION: This is the first report of OM in a large cohort of patients with IF. While OM in IF is rare, the present reported experience from a national referral centre suggests that it may be increasing in incidence. IF practitioners should be vigilant for OM as a source of sepsis in this complex group of patients, since it carries significant morbidity.

DISCLOSURE OF INTEREST: None Declared.

Other intravenous and vascular access resources that may be of interest (External links – IVTEAM has no responsibility for content).