BROWSER'S NOTES

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Published online: 22 December 2013 © ISS 2013

What is the rate of methicillin-resistant Staphylococcus aureus and Gram-negative infections in open fractures? Chen AF, et al. Clin Orthop Relat Res. 2013 Oct;471(10):3135–40 (doi:10.1007/s11999-013-2855-4)

A retrospective study on 189 patients with 202 open fractures treated from 2002 to 2010 revealed 20 to develop infections (10 %). The most common organism was staphylococcus. Five (25 %) of these had methicillin resistant staph aureus (MRSA) and 11 (55 %) were cultured for a gram negative organism and six of these (30 %) had multiple organisms. The incidence of MRSA was 2.5 %. The authors conclude that the relatively high incidence of MRSA and gram negative infections after open fractures may require re-evaluation of current antibiotic regimens.

Expansion of intestinal Prevotella copri correlates with enhanced susceptibility to arthritis. Scher JU, et al. Elife. 2013 Nov 5;2(0). pii: e01202. doi:10.7554/eLife.01202

Using shot gun sequencing 75 % of patients with new onset rheumatoid arthritis (RA) had a predominance of intestinal pro-inflammatory Prevotella copri. This was identified only in 11.5 % of patients with long standing RA and in 21.4 % of healthy controls. Individuals with high levels of P. Copri were found to have a reduction of other intestinal bacterial species considered beneficial. The clinical implication is the potential

to manipulate the intestinal microbiome through diet, antibiotic therapy and provision of good bacteria to displace P. copri and reduce the prevalence of RA.

Anatomy of the anterolateral ligament of the knee Claes S, et al. J Anat. 2013 Oct;223(4):321–8. doi:10.1111/joa.12087

The impetus for the authors' study of 41 cadaveric knees was based on an observation by the French surgeon, Segond, who in 1879 described a pearly resistant fibrous band at the anterolateral aspect of the knee attached to fracture that bears Segond's name. The authors of this study named Segond's pearly band the anterolateral ligament which was found in 40 of the 41 cadaveric knees attached to the lateral femoral epicondyle, anterior to the LCC (with connecting fibers between the two structures) following an oblique course distally to the anterolateral tibia and attaching between Gerdy's tubercle and the fibular head. It was separate from the iliotibial band but firmly attached to the lateral meniscus. This structure is believed to control tibial internal rotation and pivot shift. Having shown the anterolateral ligament to be a distinct structure the authors propose that its role in pivot shift injuries and knee stability would need to be clarified by investigating its biomechanical function.

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