

Provincial Laboratory Services



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Diagnosing and treating Bone infections: 1) Sending Tissue Rather Than Bone Alone, 2) Additional Susceptibilities- New Process

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This information applies to: Island Surgeons, OR Nurse Educators, Enterostomal Therapy Nurses

Bone infections (osteomyelitis) can be difficult to diagnosis or manage especially when there are multiple organisms identified.

Firstly, the Microbiology laboratory encourages surgeons to submit nearby tissue in a SEPARATE container in addition to bone samples when attempting to diagnosis a bone infection (Commonly diabetic foot associated osteomyelitis, or less commonly coccyx wound associated osteomyelitis). Bone samples require an incubation step in liquid and therefore will not have a gram stain including leukocyte count, it is unable to quantitate the organisms present, cannot offer molecular testing and it takes at least an extra day to process.

Also, the lab would also benefit from knowing if the sample was NOT obtained under sterile conditions with a local prep. Please add a comment to the requisition or the order notes when prep is NOT applied.

Occasionally the Microbiology laboratory receives complete or near complete portions of toes or fingers. **Going forward these will not be routinely accepted.** These samples would be better processed by taking the representative samples as discussed above at the patient side and sending to the laboratory. Typically, the lab needs one “pea” of bone / bone fragments and one cubic centimeter of tissue. Yet at least 50% more bone or tissue is necessary for molecular, mycobacteria or other referred out testing.

Secondly, for complicated / polymicrobial infections there are additional susceptibilities that can be offered. Please speak to **Sarah Lutes** (902-894-2587; saelutes@ihis.org) antimicrobial pharmacist who is working with the laboratory in the absence of a day-to-day medical microbiologist for this service. For instance, this can include reporting fluoroquinolones, doxycycline, daptomycin and rifampin for gram-positive organisms as well as a navigation through penicillin allergies as appropriate. Infectious diseases opinions can also facilitate reporting.

Thank you for continuing to assist in using our microbiology services wisely during the pandemic and improving the care of our patients.

For more information, contact:

Vanessa Arseneau
Chief Technologist
Provincial Laboratory Services
Queen Elizabeth Hospital
(902) 894-2310
VLArseneau@ihis.org