Antibiotic Use

Antibiotics should be administered at least 1 hour before the procedure. Based on recent literature, we have developed our own protocol. There are 4 different protocols that we use: Skin, Biliary, Urinary, Embolization.

Skin

[Potential]: Ports and tunneled lines in immunosuppressed patients; solid organ embolization
[Absolute]: none

This protocol was originally used in immunosuppressed patients when indwelling ports were placed. The rational was that if any skin flora was not sterilized and make it into the bloodstream, that these antibiotics would stop the infection. The literature does not support this. In addition, earlier surgical literature advocated using this for solid organ embolization. This too was not supported, although some will still give it.

Biliary

[Potential]: none
[Absolute]: PTHD, Biliary tube changes, TIPS, PVE

This regimen was developed as both gram (-) and anaerobe coverage are needed. Each time either a new stick or routine tube exchange is performed, these antibiotics must be given. There will be some patients that routinely go into bacteremia / septicemia after each procedure and, because of this, are given even stronger antibiotics. Because of the propensity of traversing the biliary ducts is great, these antibiotics are also given patients undergoing TIPS and PVE.

Urinary

[Potential]: Nephrostomy catheter exchange
[Absolute]: PCN

The bacteria we are concerned about here are primarily gram (-) and the antibiotics are chosen accordingly. ALL new PCN placements are to receive antibiotics. Those patients that are returning for a tube change that are having no
symptoms of infection, obstruction or stone burden, antibiotics are not required. If the urine is fowl smelling or the tube has stopped functioning, antibiotics must be given.

**Embolization**

[Potential]: none  
[Absolute]: Hepatic artery embolization with incompetent/absent Sphincter of Oddi

This regimen primarily concerns itself with Hepatic Artery Embolizations. As long as there is a competent Sphincter of Oddi, antibiotics are not required. However, if the patient has had a sphincterotomy, hepaticocjujenostomy or any other surgery that would allow free flow of bowel contents into the biliary tree, they have a MARKED risk for infection. Therefore we give antibiotics days before, during and after the procedure to protect them from hepatic abscess formation. See Biliary Enteric Anastamosis Prep. Even with this regimen, many patients still form abscesses.

<table>
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| Embolization (Bowel Prep) | Neomycin 500mg PO 1, 2, 11pm before procedure  
Erythromycin 500mg PO 1, 2, 11pm before procedure  
Flagyl 500mg PO BID start 2 days before procedure and continue 11 days after procedure  
Levoquin 500mg PO QD start 2 days before procedure and continue 11 days after procedure |