Antibiotic Treatment for Severe Sepsis

“Appropriate antibiotic therapy” given as early in the disease process as possible is essential in maximising the survival of patients with severe sepsis.

“Appropriate antibiotic therapy” means giving antibiotics to the patient which are active against the strain of bacteria causing their infection. However at the time of starting treatment this is unknown and so we have to give “best guess” therapy initially. However in this era of rapidly rising levels of bacterial resistance, achieving effective coverage is becoming more difficult. **No single antibiotic can reliably achieve this aim.**

Guidance for treatment of patients with severe sepsis is shown in the pink section at the bottom of the Adult Antimicrobial Treatment Poster.

Audits of severe sepsis patients in our Trust indicate many patients receive a single agent – typically piperacillin / tazobactam – only.

**Stat doses of gentamicin are a very valuable part of treatment for a number of different types of infection. The single dose of 3mg/kg can be given safely to all patients irrespective of renal function and does not require blood test results prior to administration.** Renal toxicity with gentamicin generally occurs after multiple doses given over a number of days due to cumulative effects of the drug and is rarely seen with a single dose.

**Remember** – advice on use of antibiotics is always available from a Microbiologist and prescribers should discuss all severe sepsis cases within the first 24 hrs of commencing treatment.

**Dr Neil Todd, Clinical Microbiologist and Antibiotic Guardian, neil.todd@york.nhs.uk**