Trimethoprim-sulfamethoxazole versus vancomycin for severe infections caused by methicillin resistant *Staphylococcus aureus*

This randomised trial was conducted in Israel to determine whether trimethoprim-sulfamethoxazole is non-inferior to vancomycin for the treatment of severe infections due to methicillin resistant *Staphylococcus aureus* (MRSA)? Apparently, two previous trials had provided conflicting results.

No significant difference in treatment failure was noted and the difference in 30-day mortality was also non-significant. However, the mortality rate in those with bacteraemia was significantly worse in the trimethoprim-sulfamethoxazole group.

The conclusion reached was that trimethoprim-sulfamethoxazole did not achieve non-inferiority to vancomycin in the treatment of severe MRSA infections, and the difference was particularly marked for patients with bacteraemia.

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**Pneumonia requiring hospitalisation among US adults**

Community-acquired pneumonia is a leading cause of hospitalisation and death among US adults. Incidence estimates of pneumonia confirmed radiographically and with the use of current laboratory diagnostic tests are needed. Apparently, the last similar study done in the US was in the 1990s, before the routine administration of pneumococcal conjugate vaccine in children, and the development of more sensitive laboratory tests.

Among 2,259 patients who had radiographic evidence of pneumonia and specimens available for both bacterial and viral testing, a pathogen was detected in 853 (38%): one or more viruses in 530 (23%), bacteria in 247 (11%), bacteria and viral pathogens in 59 (3%), and a fungal or mycobacterial pathogen in 17 (1%). The most common pathogens were human rhinovirus (in 9% of patients), influenza virus (in 6%), and *Streptococcus pneumoniae* (in 5%). Unsurprisingly, it was found that community-acquired pneumonia incidence correlated with age—those aged over 80 years had a six-fold incidence compared to the whole group.


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**Arthroscopic surgery for degenerative knee disease?**

What are the benefits and harms of arthroscopic knee surgery involving partial meniscectomy, debridement, or both for middle-aged or older patients with knee pain and degenerative knee disease? This is the question which this study from Denmark and Sweden examines.

The researchers identified nine relevant trials. The main outcomes were pain and physical function. Apparently, arthroscopy showed a small benefit for pain at 3 and 6 months. There were no significant benefits on physical function. Harms noted included deep venous thrombosis (4.13 events per 1,000 procedures) and its consequences.

They conclude that the small benefit seen from interventions that include arthroscopy is limited in time, absent 1 to 2 years after surgery, and associated with harms.

An editorial reviewer notes their results and his opinion is that the procedure is overused, ineffective, and potentially harmful.

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**URL:**