The clinical effectiveness and cost of a pneumococcal urine antigen immunochromatographic test (BinaxNOW Streptococcus pneumoniae) in the diagnosis of community acquire Streptococcus pneumoniae pneumonia in patients admitted to hospital

Sinclair A, Xie X, Dendukuri N

Record Status
This is a bibliographic record of a published health technology assessment. No evaluation of the quality of this assessment has been made for the HTA database.

Citation

Authors' objectives
BinaxNOW Streptococcus pneumoniae (BinaxNOW-SP) is an immunochromatographic test for the presence of Streptococcus pneumoniae (SP) coat antigen. Applied to an initial urine sample, it can suggest a diagnosis of SP infection within an hour or less, in contrast to cultures, which may take 24 hours or more. BinaxNOW-SP is believed to have higher sensitivity than blood culture and is expected to increase the percentage of patients who receive a precise bacteriological diagnosis. This has the potential to permit the use of narrower-spectrum antibiotic therapy, and in turn reduce risk of antibiotic resistance or Clostridium difficile associated diarrhea. The Technology Assessment Unit (TAU) was requested to evaluate clinical effectiveness and cost effectiveness of BinaxNOW-SP in the diagnosis of community acquired pneumonia (CAP) in patients admitted to the MUHC.

Authors' conclusions
We recommend that Binax-NOW not be used in the routine testing of patients suspected of community acquired pneumonia. Any use that takes place should be carried out within a protocol, to be determined by the Departments of Microbiology and Infection Control, with the objective of defining the value of this test. This issue should be reviewed in one year at which time usage and value of this test should be reviewed.

Final publication URL

Indexing Status
Subject indexing assigned by CRD

MeSH
Humans; Community-Acquired Infections; Pneumonia, Pneumococcal; Streptococcus pneumoniae; Reagent Kits, Diagnostic; Urine; Cross Infection

Language Published
English

Country of organisation
Canada

Province or state
Quebec

English summary
An English language summary is available.
Address for correspondence
Technology Assessment Unit of the MUHC, Centre for Outcomes Research and Evaluation (CORE), Research Institute of the McGill University Health Centre, 5252 boul. de Maisonneuve, Bureau 3F.50, Montreal, Quebec H4A 3S5 Email: nandini.dendukuri@mcgill.ca

AccessionNumber
32012000049

Date abstract record published
16/06/2012