

Improving differential diagnosis of tuberculosis using BMJ Best Practice and BMJ Learning

Dr Aysel Aslanova (Ismayilova) is a chest physician and researcher at the Scientific Research Institute of Lung Diseases in Azerbaijan and has worked there since 2007. BMJ caught up with her recently to hear about how she is using BMJ Best Practice and BMJ Learning in her work.



At the Scientific Research Institute of Lung Diseases our major focus is the timely diagnosis and associated treatment of our patients. However, the main difficulty we encounter in daily practice is the differential diagnosis of lung diseases.

My specialties are pulmonology and pulmonary tuberculosis, and I regularly refer to national protocols and other resources to keep my knowledge updated. Evidence-based guidance in all areas of medicine is constantly changing and BMJ Best Practice is helping me keep up with the latest evidence-based approaches, treatments and diagnostic protocols. It also provides ongoing support for my clinical decisions.

Recently an 18-year-old girl presented to our hospital. She had initially been examined by her local physician as she was experiencing fatigue, periodic sub-febrile and febrile fevers and cough. She was referred to the Thalassemia Center because red pink spots (erythema) had appeared on her lower extremities. There she was diagnosed with vasculitis and prescribed treatments with glucocorticosteroids. Forty five days after this treatment, she developed a severe cough, difficulty breathing and a daily fever and came to our hospital.

I was able to diagnose her with a primary tuberculosis complex and used the BMJ Best Practice topic on 'Erythema nodosum' to confirm this diagnosis. It provided me with a second opinion. The patient was discharged from hospital and referred for the ambulatory treatment phase of management at a tuberculosis dispensary (when her cough and difficulty of breathing disappeared and an x-ray showed improvement).

In another example I saw a patient who had previously been diagnosed with disseminated tuberculosis with diffuse damage in both lungs. However, the other complaints of the patient, such as blurred vision and high blood pressure were not considered - so he was not referred for other investigations.

Treatment for tuberculosis did not improve his condition. Eventually, the patient came to our hospital and was diagnosed sarcoidosis of the eye and lungs. I used the complementary tests and information from BMJ Best Practice on 'Assessment of lymphadenopathy' and 'Sarcoidosis' to interpret the radiological images and confirm the diagnosis.

The patient was successfully treated for one year and the diffuse changes in the lungs and the lymphadenopathy disappeared. Vision problems have been followed up by an ophthalmologist. Due to the late diagnosis and damage to the optic nerve, he did not fully recover his vision.

As medicine progresses, continuous professional development is essential for all doctors. In our work and in our scientific research we are increasingly working to evidence based medicine. As a member of the European Respiratory Society (ERS) in Azerbaijan, I benefit from the resources of that community as well. Both BMJ and ERS are sources of indispensable scientific exchange, and new knowledge and skills.

I often refer to BMJ Best Practice and BMJ Learning for the new evidence-based information they provide to improve my daily practice. I use them to analyse new clinical cases and situations. It is convenient to be able to access both within work hours, in the office, and at home during my time off.

There has been extremely positive feedback to BMJ Best Practice and BMJ Learning from all my colleagues that are also using them. However, all doctors in Azerbaijan would benefit from access to the evidence-based information they provide. There is a need to further extend the use of this resources and I hope that the Clinical Decision Support Training Initiative will continue to grow.

If you would like to know more about the Clinical Decision Support Training Initiative or would like to share your feedback with BMJ, please email Kate Shanahan, kshanahan@bmj.com