

International Day of Radiology 2014
Interview on brain imaging
Kazakhstan / Prof. Bulat Baizhigitov



**INTERNATIONAL
DAY OF
RADIOLOGY**
AN INITIATIVE OF THE ESR, ACR AND RSNA

Answers provided by Bulat Baizhigitov, head of the radiology department at the National Centre of Neurosurgery in Astana, Kazakhstan.

European Society of Radiology: Imaging is known for its ability to detect and diagnose diseases. What kind of brain diseases can imaging help to detect and diagnose?

Bulat Baizhigitov: The equipment available at our centre can detect diseases such as brain tumours, degenerative disease, ischaemic and haemorrhagic stroke, post-traumatic changes and vascular pathology.

ESR: How useful is imaging in brain disease management? Does it improve the understanding of disease or improve patient prognosis?

BB: Imaging is useful in terms of both understanding disease and improving patient prognosis.

ESR: What kind of technology and techniques do radiologists use to image the brain? Are there any specific techniques for particular diseases?

BB: We use computed tomography (CT) and magnetic resonance imaging (MRI) to image the brain. Other techniques include catheter angiography.

ESR: What is the difference between a radiologist and a radiographer? Who else is involved in performing brain imaging exams?

BB: At our centre, radiographers mainly work with x-ray equipment, while radiologists work with CT and MRI scanners. Besides doctors, technicians take part in performing brain imaging exams.

ESR: Access to modern imaging equipment is important for brain imaging. Are hospitals in your country equipped to provide the necessary exams?

BB: The role of modern imaging equipment cannot be underestimated. The level of hospital equipment in our country is adequate.

ESR: In many countries there are waiting lists for MRI exams. How long can patients typically expect to wait for an exam in your country?

BB: Patients wait on average one to two weeks.

ESR: As the global population gets older, the risk of developing neurocognitive and neurodegenerative disorders increases. How can imaging help tackle this issue?

BB: Imaging allows these diseases to be diagnosed early.

ESR: Some imaging techniques, like x-ray and CT, use ionising radiation. What risk does this radiation pose to the patient and what kind of safety measures are in place to protect the patient?

BB: During the x-ray and CT exams the radiation dose is taken into account. Individual protection equipment is also used.

ESR: In general, patients don't see the radiologist. A patient will discuss the image with the neurologist, neurosurgeon or oncologist. When they ask a question, they're often told "I'm not a radiologist". Why don't radiologists discuss the image with the patient first?

BB: In Kazakhstan, the radiologists see the patients and can discuss all questions relative to imaging.

ESR: How expensive are radiological examinations to the health service and is there a risk that some of these examinations could be blocked by health technology assessment agencies deeming them to be not cost-effective (especially in relation to screening)? If so, how can patients help to ensure that these examinations are made available?

BB: The price for radiological examination is consistent with the cost of living in the country.



***Bulat Baizhigitov** is head of the radiology department at the National Centre of Neurosurgery in Astana, Kazakhstan.*

He specialises in diagnostic and interventional radiology. In diagnostic radiology he focuses on CT, MRI, catheter angiography, CTA. In interventional radiology he performs transcutaneous biopsy by CT control; puncture treatment of kidney cyst, adrenal cyst, hepatic cyst by CT control; draining of hepatic abscess, abdominal cavity abscess, retroperitoneal abscess by CT control; balloon angioplasty of aorta coarctation, balloon angioplasty and stenting of renal, iliac and femoral arteries; implantation of cava-filters; transcutaneous transhepatic cholecystostomy and transcutaneous transhepatic cholangiostomy by CT or combined

ultrasound and X-ray control; transcutaneous transhepatic stenting of biliary ducts; puncture nephrostomy by ultrasound, x-ray or CT control.

He has authored 82 publications and several monographs.