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.