International Day of Radiology 2017
Interview on Emergency Radiology
Czech Republic/Dr. Andrea Šprláková-Puková

Dr. Andrea Šprláková-Puková says in the Czech Republic, emergency exams have the highest priority in radiology departments, but radiologists also perform scheduled exams in the time between urgent calls

European Society of Radiology: Could you please describe the role of the radiologist in a typical emergency department in your country?

Andrea Šprláková-Puková: The role of the radiologist is important in determining the patient's diagnosis and subsequent therapy. Urgent situations must always be solved quickly in harmony with other members of the emergency team.

ESR: What does a typical day in the emergency department look like for a radiologist?

AŠ: The radiologist and the radiological technician must immediately respond to urgent calls and perform the required examinations, usually ultrasound or CT. Emergency examinations always have the highest priority.

In the time between urgent calls, radiologists perform the scheduled examinations, such as CT and ultrasound.

ESR: Teamwork is crucial in an emergency department. How is this accomplished in your department and who is involved?

AŠ: The primary emergency team consists of an intensive care physician, traumatologist and radiologist. Other specialists may be consulted, depending on the specific pathological findings.

ESR: How satisfied are you with the workflow and your role in your department? How do you think it could be improved?

AŠ: The emergency team at our hospital works well, and the radiologist's role is vital. The key role of the radiologist is respected and valued.

ESR: Which modalities are used for different emergencies? Could you please give an overview sorted by modalities?

AŠ: All imaging modalities are used in our emergency department. Which modality we use depends on the type or mechanism of trauma and the degree of clinical disability. Interventional radiology plays also an important role in some cases (e.g. thrombectomy in stroke and arterial embolisation in cases of acute bleeding).

X-rays are used mainly to diagnose skeletal trauma.

Ultrasound is used for abdominal emergencies, and focused assessment with sonography for trauma (FAST) is used in polytraumatised, clinically unstable patients. Ultrasound also may be used in some cases of soft tissue trauma.

CT is an important modality for polytrauma, acute abdomen, and other acute situations, such as pulmonary embolism. CT also may be used in major skeletal trauma, and it is the first line modality in head trauma and stroke.

MRI is used mainly for suspected spinal cord injuries.
ESR: Is teleradiology an issue in emergency radiology? If yes, how so, and how often is it used?
AS: Teleradiology may occasionally be used during night shifts for reporting emergency CT examinations, except in polytrauma cases. Interventional specialists may use it to help decide on indications of interventional procedures.

ESR: Are emergency radiologists active anywhere other than emergency departments? Do they have other non-emergency roles, or other emergency roles in other departments?
AS: Usually, radiologists are not assigned exclusively to emergency radiology, and they routinely perform non-emergency examinations using various imaging modalities throughout the department.

ESR: Do you have direct contact with patients and if yes, what does it entail?
AS: We have contact with the patients primarily during ultrasound examinations and interventional procedures. In many cases, it is useful for obtaining additional, important clinical information.

ESR: How are radiologists in your country trained in emergency radiology? Is emergency radiology a recognised specialty in your country?
AS: Emergency medicine is an integral part of the educational curriculum in radiology. Each radiology resident must complete a required number of emergency examinations under the supervision of an experienced radiologist and work for a specified period in the radiology department of hospitals with a trauma centre.
In the Czech Republic, emergency radiology is currently not a separate specialty, like interventional radiology or neuroradiology.

Dr. Andrea Šprláková-Puková has been a consultant radiologist in the radiology department of University Hospital Brno in Brno, Czech Republic, since 1996.
Her specialties are ultrasound, especially musculoskeletal ultrasound, including contrast-enhanced ultrasound; CT; MR; fluoroscopic examinations; and x-rays.
She is a doctoral candidate in a radiology programme, whose dissertation is titled, The role of contrast enhanced ultrasound examination in the detection of active rheumatoid arthritis.
She is responsible for organising an annual traumatology congress.
She is a member of the Czech Radiological Society (CRS), and a member of the Section of Magnetic Resonance in the CRS.