

**INTERNATIONAL
DAY OF RADIOLOGY**

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**International Day of Radiology 2017
Interview on Emergency Radiology
Estonia/Dr. Aleksandr Šamarin**

Radiologists' already heavy workloads in Estonia continue to increase up to 10% each year according to Dr. Aleksandr Šamarin

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

Aleksandr Šamarin: Each day, there are three radiologists directly involved in reading emergency cases (e.g. CT, ultrasound and x-ray) with four-hour shifts during the day. All radiologists have full access to patients' medical data and previous examinations (including laboratory data and operation protocols). Radiologists have the right to change the type of examination or protocol, and they also have the right to refuse to perform an examination. They may also discuss the type of examination with the referring physician.

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

AŠ: The three radiologists who work daily in the emergency department work in one of three stations: CT examinations from the emergency department and the 40-bed ICU unit are performed in the CT station; this station also handles emergency CT examinations from smaller, partner hospitals using teleradiology. All x-ray examinations from the emergency department and ICU unit are performed in the x-ray station; this station also handles examinations from smaller partner hospitals using teleradiology. All ultrasound examinations from the emergency department and emergency patient referrals from general practitioners are handled in the ultrasound station.

Typically, the daily workload in the emergency department is about 250 patients. Daily rounds for emergency radiologists are 4 hours and night shifts are 12 hours.

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

AŠ: Our teamwork with the emergency department is very good and improving all the time. A radiologist is a permanent member on the trauma team, which provides an immediate response for all multitrauma cases. Every morning, radiologists participate in interdisciplinary meetings with emergency department staff members, and every week, they meet with surgeons. One of the consultant radiologists is responsible for collaborating with the emergency department.

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

AŠ: I am satisfied with my role in my department. Generally speaking, our workload is quite heavy, and it is growing up to 10% annually. We probably need a stricter policy for CT referrals.

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

AŠ: All modalities are used in the emergency department. The CT scanner is the workhorse of the emergency department for all kinds of examinations, starting from head CT up to whole

body CT for severe trauma, including paediatric trauma cases. Ultrasound is the first line examination for abdominal emergencies and extended focused assessment with sonography for trauma (eFAST). Also, it is a screening tool for vascular and neurovascular emergencies. X-rays are used for minor trauma and are the first-line examination for chest emergencies. Angiography examinations are used in spleen and pelvic embolisations after trauma, and for thrombectomy, including brain arteries. MRI has a limited role, used for select cases only (e.g. paediatric and neurology cases)

ESR: *Is teleradiology an issue in emergency radiology? If yes, how so, and how often is it used?*

AŠ: We use teleradiology every day. Our radiologists are reading emergency CT scans and x-rays examinations from five smaller hospitals. As we use national PACS there is also the possibility to take a 'second look' for all examinations done in other Estonian hospitals.

ESR: *Are emergency radiologists active anywhere other than emergency departments? Do they have other non-emergency roles, or other emergency roles in other departments?*

AŠ: Yes, all radiologists are active in non-emergency roles. We do not have radiologists who deal exclusively with emergency cases.

ESR: *Do you have direct contact with patients and if yes, what does it entail?*

AŠ: Yes, during ultrasound examinations.

ESR: *How are radiologists in your country trained in emergency radiology? Is emergency radiology a recognised specialty in your country?*

AŠ: Emergency radiology is a part of the radiology residency programme. Therefore, all radiologists have basic training in this field. In Estonia, emergency radiology is not approved as separate subspecialty.



Dr. Aleksandr Šamarin is a consultant radiologist at the North Estonia Medical Centre in Tallinn, Estonia. His special interests are musculoskeletal and emergency radiology.