

|Abstract for "Paediatric CT Dose Survey – Radiographers' experience in Bergen"

Bodil Røtne, Haukeland Universitetssykehus, Bergen

Haukeland University Hospital is one of three larger hospitals in Norway, which has been involved in collecting dose information on paediatric CT examinations for the period November 2011 until October 2012.

Dose, scanning technique, and indication were the main focus whilst working with the Survey, but we also found it useful for collecting other information that seemed relevant for the dose results.

The scanners involved were a 4-slice General Electric LightSpeed Plus, an 8 slice General Electric LightSpeed Ultra, and a Toshiba Aquilion 64 slice.

Method: Dose, patient and protocol details were collected retrospectively from the digital archiving system.

Results: 377 Paediatric patients were included in the Survey, giving an average of 31 patients per month.

Roughly 60% were ordered as emergency cases. 48% of all patients were taken on evening, weekend, public holiday, or night duty. Approximately 25% of all patients had an appointment within the time allotted to CT with the paediatric radiologist present, and 15% had an appointment that did not coincide with the paediatric radiologist's time at CT.

The most frequent examination, approximately 40%, was CT of the Head region, which includes brain, skull, inner ear, face, orbits, and nasal sinuses. CT of the Chest followed with approximately 24%, then CT Abdomen and CT Neck with approximately 10% each. In addition there were approximately 15% multiregional examinations, including Head and Neck, Neck and Chest, and Chest and Abdomen.

CT Angiography was performed on 14 patients, the majority in the Chest region.

Conclusion: Work on the Survey revealed very useful data, and highlights the need for regular and detailed evaluation of CT dose. The data collected provides a good starting point for necessary optimization work on many Paediatric CT protocols.