



Impact of the size of psoas in the evaluation of the grade and malignity of urothelial tumors

Context

This extraction was performed in the context of a multi-centric retrospective study led by Dr. Xylinas, urologist at the Cochin Hospital in Paris. The objective of this study is to evaluate the sarcopeny (decrease in the size of the muscle) of the psoas muscle as a predictive element in the assessment of malignity of urothelial tumors of the high ureter and kidney. At the Toulouse University Hospitals, this required to extract from the PACS and anonymize 51 abdomen-pelvis CT scans, that is 27,000 images approximately, for patients that underwent a nephro-ureterectomy, so that these exams can be secondarily read at Cochin Hospital.

Radiomics Enabler® : a 3-stage process



1. Selecting relevant sequences: from a list of names, birth dates and exam dates, Radiomics Enabler® was used to query the PACS (DICOM C-FIND) and obtain a list of exams to extract;
2. Extraction, Anonymization: The extraction (DICOM C-MOVE), and the anonymization of DICOM headers, were performed as a background task at night time. A lookup table saved the original IDs and anonymized IDs for traceability purposes and future use if required ;
3. Verification: the user was able to check that the operation was complete. In the present case, the anonymized exams were exported on a media in the DICOM-Dir format and was given to the main investigator.

Testimonial

“From the list of patients and exam dates, we were able to extract and anonymize all images in one single step. I was then able to log on to the system, check the consistency of extracted exams before and after anonymization, copy the exams on a USB key, and provide them to the main investigator.”

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