Incidental Findings in the Emergency Department

Mary Kassis, University of Queensland MD – 44557357
Supervisors: Dr Rob Eley, University of Queensland Faculty of Medicine and Princess Alexandra Hospital - Emergency Department
Dr Georgia Livesay, University of Queensland Faculty of Medicine and Princess Alexandra Hospital - Emergency Department

Introduction
Medical imaging is used by clinicians to aid in diagnosis of presenting complaints. Emerging technologies with greater sensitivity result in increasing numbers of findings that do not relate to the main purpose of the investigation. These incidental findings, also known as incidentalomas, raise questions regarding the required communication between patient and clinician and subsequent follow-up.

Methods
Key terms were searched in multiple databases to identify papers and studies that were conducted about incidental findings in the emergency department. Studies were limited to papers published in English during 2000-2020 using the key words: incidental findings; emergency department; documentation; computed tomography OR radiograph OR x-ray OR ultrasound OR MR).

Results
30 research papers came from four countries including one from Australia. Incidental findings were reported in 4-62% of patients who underwent different medical imaging, with the majority resulting from CT scans, especially those of the abdomen and pelvis.

A rate range between 17-51% of incidental findings was found in CT, with lower rates in x-ray and ultrasound.

Concerningly, low rates were reported in patient documentation (23-48%) and discharge summaries (10-25%) and in communication with patients about the findings (9-22%).

Discussion
Results showed increasing rate of incidental findings but low rates of reporting and communication.

The studies illustrate that the potential benefit of discovering incidental findings that will lead to a change in management has to be weighted against the potential harm:

• Increase anxiety to patients
• Longer hospital stays
• Higher cost to patient and the system
• Further imaging risks (anaphylaxis, radiation exposure)

Figures References