Please count your fingers...
A specimen was received for histopathology labelled as ‘bladder biopsy’. Two pieces of tissue were present in the pot and processed, cut and stained as normal. One was unremarkable bladder mucosa, the other looked like full thickness skin, with dermis, and including a Pacinian corpuscle! Investigation revealed that it wasn’t an anatomical bladder variant and that the urologists had all their remaining digits. It was actually a resected ear tag from a different patient, removed by a plastic surgeon and placed in a pot. The surgeon decided that histology was not required, but the unlabelled pot was then placed back on the shelf and was then reused unknowingly by the urologist on the next theatre list. Hence, two specimens. No harm done, but it is important that theatre staff dispose of used pots.

Acid bath
Decalcification in dilute acid may be needed to allow cutting of specimens. Problems with this process have included delayed diagnosis, where the specimen has been ‘forgotten’ after some while following a change in lab personnel, and problems with the use of concentrated nitric acid, resulting in loss of the specimen. Underlying these issues is a common feature in human factors related to safety incidents, that of higher numbers of safety incidents related to non-routine pathways. Decalcification, whilst not rare, is not a regular part of the majority of dissection activity in most departments. You should ensure that all your less common activities have the same level of scrutiny as the routine work, and it is clear who is checking samples and how frequently.

Wrong organ
A patient admitted with suspected appendicitis undergoes appendicectomy and the specimen is sent to the laboratory. On histological examination it is a normal ovary and is reported as such. No additional steps were taken to alert the clinician to the wrong site surgery or continuing risk to the patient from the inflamed appendix. This can be fatal. See the College guidance document The communication of critical and unexpected pathology results - which may include normal tissue.

Missed one
A missed diagnosis, e.g. missing an area of tumour or a granuloma, may be picked up at review, audit or later by clinical teams. A theme in some of these events is of a single slide, or area of a slide, with an abnormality that is not present in all sections. The pathologist has missed the area, but will immediately recognise the abnormality on review. Reasons for the miss include not having all the slides in the tray, picking up the wrong slide, being interrupted and not finishing looking at a slide.

A missing slide from a series is usually picked up in the lab, but pathologists should always check that the block list correlates with the slides...beware of and don’t forget the ‘missing’ decal specimen also!

Most pathologists have their own systems of viewing slides, often centred on slide trays. Sometimes the slides are looked at and replaced back adjacent to the previous one, and the next one taken in turn, which can lead to confusion. Others leave a space in the tray between viewed and unviewed sections, or replace viewed slides ‘upside down’ in the tray, which provides a visual confirmation of what has been viewed. Think about how you do this!

Any system is also vulnerable to problems caused by interruption. A typical example would be looking at slides 1, 2, 3, 4 and then the phone rings. The call is about a result for a patient. You deal with the query and then continue with slides 6, 7, 8. Slide 5 or part of slide 5 has been missed and is the only one showing the granuloma or the tumour. Such errors can be reduced by trying to minimise interruptions (if only, we hear you say, we do know how hard it can be). ‘Do not disturb’ signs are used in some places, and be consciously alert for this error when you are interrupted.