

ANZCVS examinations: Radiology Chapter Resources

Feb 2018

How to write a radiology report:

The radiology report forms part of your medical record. The report should be a clear statement of the projections evaluated, their quality, with a concise description of the radiographic findings. The findings are then summed in the radiographic interpretation or conclusion. This is followed by a rank order list of the possible differential diagnoses and recommendations of further tests or treatments. Thus, the report should be presented in a number of sections:

Signalment and Projections and Quality:

In the exam situation the radiology report should state the signalment of the patient, ie skeletally mature or immature, male or female (if applicable). This won't be necessary however in your medical record. All radiographic reports should include a list of the projections provided, including any techniques used, for example contrast studies.

A comment should then be made on radiographic technique and quality – including a comment on: positioning, exposure and collimation and state if any artefacts are present. A method for remembering these aspects is the PLACE system:

- P Positioning
- L Labelling i.e. is the film correctly labelled with patient details and left and right labels, prior to processing
- A Artefacts- are any present, if so list
- C Collimation and centring
- E Exposure

If the radiographs are of diagnostic quality then state this without labouring through each criterion.

Consider the following case (see over):



Radiographic Description:

In this section you describe your radiographic findings. Radiologic findings should include consideration of the Roentgen signs: size, shape, opacity, number and if appropriate number. The radiographic signs must be described. For the case included here, in the exam situation it is insufficient to say for example “This is an osteosarcoma “, or even “There is an aggressive bone lesion within the distal radius” without describing the soft tissue swelling, the permeative and moth-eaten lysis, cortical destruction, irregular periosteal new bone production and Codman’s triangle. The conclusion that this is an aggressive bone lesion is left until the radiographic interpretation section. In the description make sure that you keep “themes” together. For example, if describing the bone lesion describe the bone changes, then the soft tissue findings. Don’t jump from bone to soft tissue and back to bone again.

Radiographic Interpretation or Conclusion:

This is where you state the interpretation of your findings ie: an aggressive bone lesion within the distal radius. This is not the place to introduce new information; it is a summary of your findings. You must provide an interpretation of each abnormality you described in your description.

Differential diagnoses:

List the differential diagnoses for each abnormality in a rank order of most to least likely, for example primary bone neoplasia is most likely such as osteosarcoma, chondrosarcoma; fibrosarcoma; haemangiosarcoma, less likely osteomyelitis

Further recommendations:

The recommendations depend on the case being discussed, it may involve further imaging or sampling. For example: for the aggressive bone lesion within the distal radius further imaging is recommended: a three-view thorax to assess for the presence of pulmonary metastases, and further tests: a bone biopsy for the definitive diagnosis. However, in the radiology membership exam the examiners only require recommendations for further imaging.