Fundamentals of Radiographic Positioning and Anatomy



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Preface

This textbook was inspired by the original publication entitled *Basic Radiographic Positioning and Anatomy* by G.A. Bell and Dr D.B.L. Finlay. It is intended to be a useful, simple and practical guide for student radiographers, practitioners and educators by combining basic radiographic techniques with radiographic images and anatomical appearances.

The radiographic technique for each projection is described in a concise manner and accompanied by photographs demonstrating the patient positioning required. For each projection, a resultant radiograph is provided alongside a line drawing which outlines the anatomical appearances which can be seen on the radiograph. Space has been provided so you can personalise the textbook by completing the sections on common positioning faults and additional radiographic projections that can be undertaken. There is also an allocated 'other notes' section.

Diagnostic radiographers are a proud profession, and rightly so. The result of our work is often unseen by the patient and yet is crucial to patient care and their treatment pathway. We are, to many, 'invisible practitioners'. Thus, the knowledge and skills that go into producing a radiographic image can only truly be appreciated by those who have studied the science, informed by generations of research and experience.

We do hope that this textbook will help you to develop your knowledge and skills along your professional journey as a diagnostic radiographer.

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Finally, our thanks goes to Charlie Harvey-Lloyd for demonstrating all the radiographic projections for the book in between studying for A-levels and his gymnastics training. I am sure you will agree, he was an excellent model!

An Introduction to Radiographic Positioning and Terminology

This chapter will describe radiographic terminology in the following sections.

- Anatomical Terminology
- Positioning Terminology
- Projection Terminology
- · Glossary of Terms

Anatomical Terminology

Diagnostic radiography uses a system of rules to describe the body and its movements. It is important to develop a good understanding of the terminology to be able to describe and understand the range of radiographic techniques outlined throughout this book. This terminology provides a clear and consistent approach to describing the location of anatomical structures and is used by a range of healthcare professionals. The use of this shared language enables clinicians and radiographers to communicate effectively in order to obtain the necessary diagnostic images.

The basic terminology descriptions refer to the standard reference position/orientation of the human body. This is known as the anatomical position.



The standard anatomical position seen in Figure 1.1 can be described as a person in the following orientation.

- · Standing upright and facing forward.
- · Arms straight, hands at the level of the hips with palms facing forwards.
- Feet together with toes pointing forwards.

FIGURE 1.1 The anatomical position.

Using the anatomical position as the standard reference, the patient aspect can be described in the following terms.

Anterior aspect: this is seen when viewing the patient from the front.

Posterior aspect: this is seen when viewing the patient from the back.

Lateral aspect: this refers to any view of the patient (or any anatomical part) from the side e.g. the outer side of a limb.

Medial aspect: this refers to any view of the patient (or any anatomical part) which is closest to the midline, e.g. the inner side of a limb.







FIGURE 1.3 Posterior aspect.



FIGURE 1.4 Lateral aspect.