Clinical Photography, Art,
Graphics and Video in Healthcare

IMI National Guidelines

Clinical Photography of Scoliosis

The IMI National Guidelines have been prepared as baseline guides on specific aspects of medical illustration activity and provide auditable standards for the future.

The guidelines can either be implemented in full, or may be amended according to individual requirements.

Copies are available on the IMI website (www.imi.org.uk).

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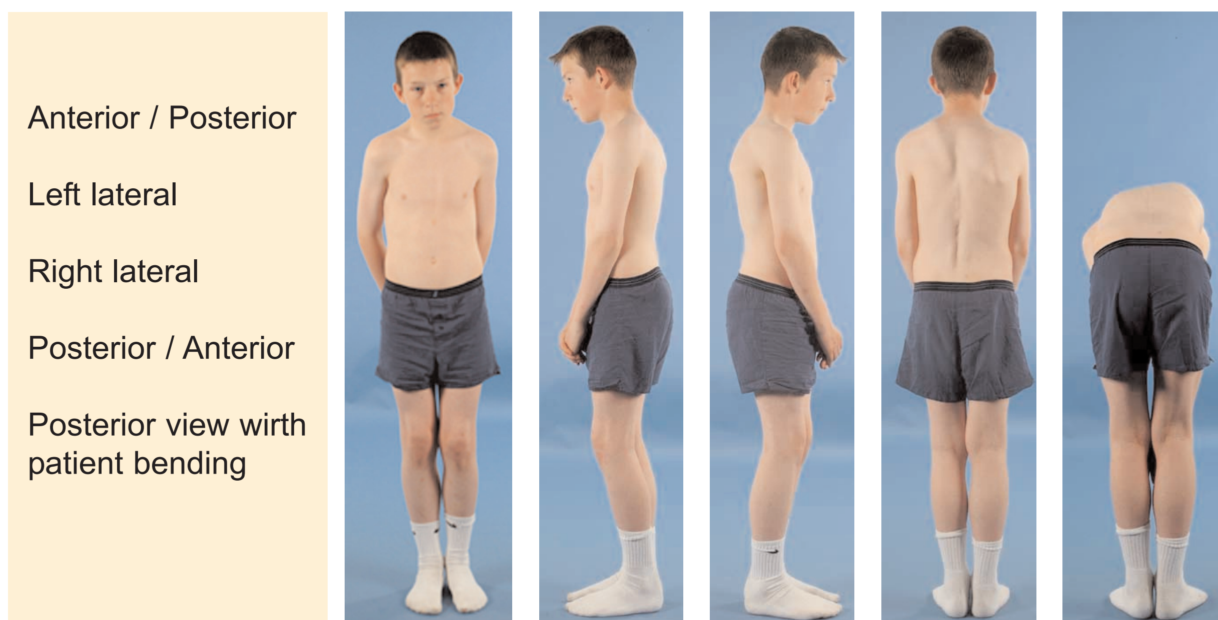
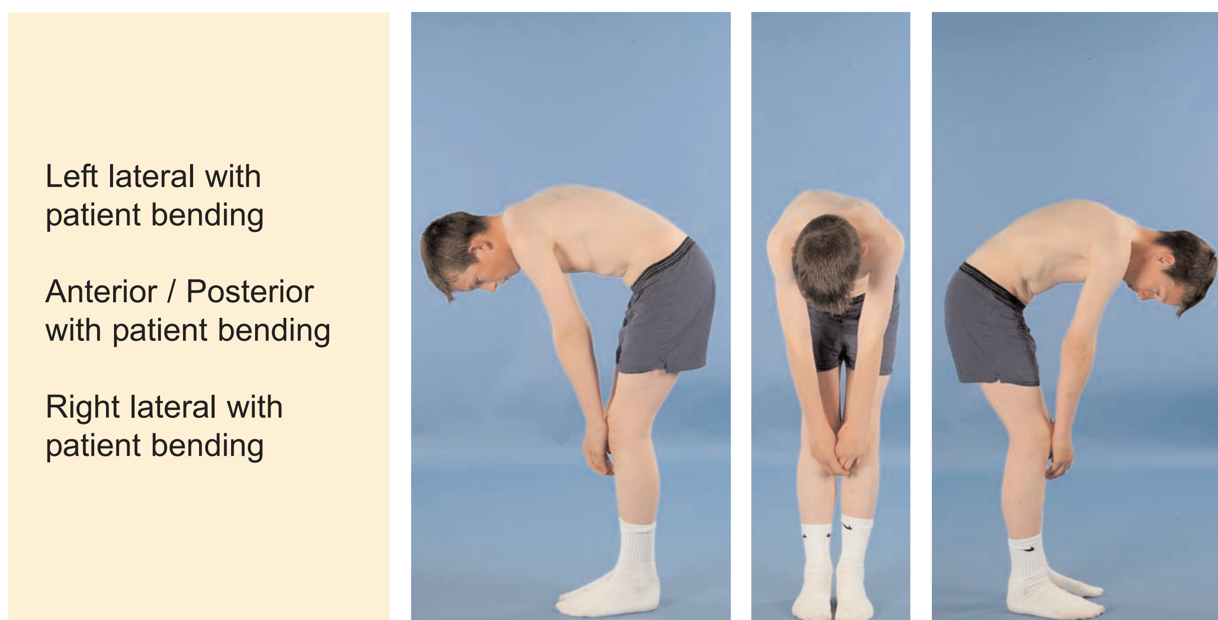
It is taken for granted that the appropriate welcome and confirmation of the levels of consent have been observed before any photography is undertaken.

Positions

A standard set of five views has been recommended for the photography of the scoliosis patient these views are:



An additional set of optional views has been suggested when required and these are:



Camera position

The camera should be tripod mounted for all views and be positioned so that the lens is parallel to the mid-spine point of the patient.

For the P/A bending view the camera should be lowered to a point parallel to the top of the patients' buttocks, or pelvic girdle.

Positioning the patient

All views are full length, including head and feet.

The patient's hair should be kept well clear of their back and neck and where possible hairgrips should be used to maintain a clear view of the neck and shoulders.

The positioning of the patient’s briefs should be that it is possible to see the natal cleft (in the P/A view) this will give an idea of where the midline emanates from and the iliac crests (on the A/P view) to check that there is no leg length discrepancy..

Shoes should not be worn, as they may conceal a difference in leg length with an internal shoe raise.

Female patients should be given the option of wearing their bra with the back-straps undone and tucked under their arms for the P/A view.

The patient is asked to stand as straight as possible **and to relax their shoulders**. This point is important, as young patients may be nervous and not aware that their shoulders are 'up'.

Position of the hands

In the following views the patients' hands should be gently clasped together:

A/P view	**- Behind the back**
P/A view	**- In front of the patient**
Lateral views	**- In front of the patient**

Care should be taken that the spine is not obscured in any lateral position, by the patient's elbows.

Importance of obtaining correct bending views: P/A view

Once the camera is lowered to be parallel with patients' buttocks, the patient is asked to bend forward slowly. The photographer should note that the importance of this view is to demonstrate any 'rib-hump' that may be present.

If the patient bends too far forward, or not forward enough, the 'rib-hump' will not present itself.

If the patient has their hands on their knees in this position they may push up with their arms and thus elicit an incorrect shoulder position. They should be asked to let their arms hang down naturally in front of them.

Magnification ratios

For departments using 35mm negative or slide film the ratio is 1:50.

For those using digital imaging it is recommended that the lens to subject distance should be constant.

Lighting

Four lights are used.

Two on the background and two used to light the patient.

The lights should be placed roughly at 45º to the patient and shone in a manner as to obtain the best result and delineation of the spine.

Care should be taken to avoid crossed shadows on the back, particularly when a patient has very 'winging' scapulae (very pronounced scapula).

Backgrounds

Should be consistent with departmental protocol.

Grids and height scales used in agreement with surgeon.

Presentation of images

By local agreement.

The IMI National Guidelines 'Clinical Photography of Scoliosis' were prepared by Mike Devlin.

Acknowledgements

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