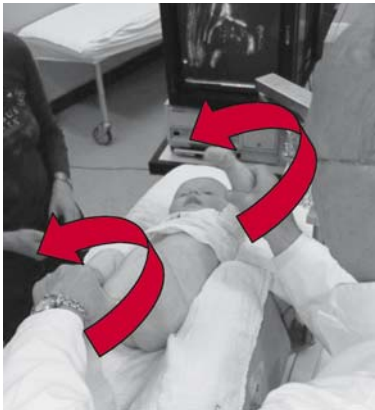


11 Scanning Technique



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The lower limb of the os ilium, the correct scan section and the acetabular labrum must be displayed simultaneously. Each of these three structures is very small and they are found within an area of a few millimetres. The difficulty arises when one or two of the necessary structures are displayed, the third one is often missing. As one attempts to find the third missing landmark one of the previously shown structures disappears and so on.

With an incorrect examination technique the baby quickly becomes restless which makes it even more difficult to get the three landmarks simultaneously. This problem can only be solved by a meticulous scanning technique in which the time factor plays an essential part.

Motto: Speed and precision are everything!

For the most part, careful organization and the scanning technique are not taken seriously enough. The technique described here is easy to teach and learn and guarantees a good-quality sonogram independent of the cooperation of the mother and child or the skill of the examiner.

NB. Hip sonography does not need experienced or skilful examiners but a standardized, reproducible technique which can be performed by everybody.

11.1 Preparation

- In order to save time the preparation is of great importance, independent of the scanning method.
- The examination must be completed before the baby becomes restless and starts to cry. A standardized examination calls for standardized positioning and, in due course, for a probe-guiding system as well.

- Outside the examination room there should be a changing table so that the mother can undress, and if necessary, clean the child calmly.
- Inside the examination room a second changing table or something similar should be placed. This is so that the blanket which the child may be wrapped in and the nappy (diaper) can be removed. This table can also be used if there is to be a clinical examination following the ultrasound examination. The other things the mother brings, including the baby's basket, clothes, bottle, and notes can be placed on it as well.
- The cradle which allows a standardized position and also a standardized scanning technique is placed on a table. The examination should be conducted standing rather than sitting. The table height should be such that both arms can rest comfortably on the edges of the cradle.
- The baby's head is near the examiner's right hand and the mother is opposite on the far side of the examining table.
- The ultrasound apparatus is on the right of the examiner.

11.2 Leading and Guiding the Mother

The mother, or the accompanying person, is often nervous. Clear instructions help to minimize organizational chaos and transmit an air of calm and trustworthiness.

The appropriate data for patient identification are entered on the computer before the mother and child enter the examination room.

The examiner stands at the examination table and greets the mother without shaking her hand. (The mother usually has both hands full and may have to put the child in an awkward position in order to shake hands.)

The examiner points out the changing table and tells the mother, "Please put your baby on