Scanning Methods

To scan means to acquire information by moving the transducer head on the skin surface of the patient. With real-time equipment, simply placing the transducer head on the abdominal wall is called scanning as the transducer head performs this function electronically. In this section, various scanning methods are explained with illustrations.

Subcostal Scanning

Fig. 2.1. The transducer head is placed along the right subcostal margin. The lower portions of the right lobe of the liver, the gallbladder, and the right kidney are visualized. By tilting the tip of the transducer head toward the head on deep inspiration, the upper portions of the liver are visualized.
Longitudinal Scanning (Right Upper Abdomen)

Fig. 2.2. With the transducer head parallel to the axis of the body, longitudinal sections can be obtained. Longitudinal scanning of the right upper abdomen is used to visualize the lower portions of the liver and the gallbladder. When the transducer head is placed directly over the ribs, the abdomen cannot be visualized because of acoustic shadowing from the ribs.

Intercostal Scanning (Right Side)

Fig. 2.3. If the transducer head is placed over the intercostal space, the liver is generally well visualized. When the liver is shrunken, this may be the only scanning method with which it is possible to visualize the gallbladder. Scanning through the posterior intercostal spaces is used for observation of the right kidney or adrenal gland.