PALPATION OF THE SPLEEN

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The art of splenic palpation is tending to lose its clinical significance as a result of dependence on modern diagnostic procedures and too hasty clinical examination. Despite these threats splenomegaly is still an important sign in clinical medicine. When it is easily palpable the problem devolves round the cause of the splenomegaly. When splenic enlargement is slight, it may be difficult to detect clinically. Its detection in some instances may constitute a vital sign in a clinical situation such as when typhoid fever, infective endocarditis or miliary tuberculosis are suspected. The success with which a clinician palpates a 'difficult spleen' is dependent upon experience and technique used. Apart from conventional methods, modified approaches have been described which claim better results.

Anatomical considerations. The spleen lies in the left upper quadrant deep to the 9th, 10th, and 11th ribs, with its long axis in the line of the 10th rib. The anterior border is sharp and may be interrupted by one or more notches. It is covered by peritoneum except where it is attached to the greater curvature of the stomach and the left kidney. It follows closely the respiratory movements of the diaphragm.[1] When the spleen enlarges, its shape and position may be altered and the anterior border may point posteriorly.

Conventional method of palpation. The patient lies on the back with the knees in flexion. The examiner is at the patient's right. The left hand is placed against the left loin and the right in the left upper quadrant parallel to the ribs. During inspiration, the right hand is moved upward under the costal margin. This method has the drawback in that the spleen may be pushed back especially if it is soft, or too much pressure is used. Another method involves the examiner standing at the patient's left shoulder and hooking the fingertips under the costal margin.[2]

Ibrahim[3] describes a method whereby among other things the hand is placed under the costal margin and the spleen felt during inspiration. His method ignores the fact that the anterior margin of the spleen may already be pointing posteriorly, with the result that it may not be felt by this method. Dinison[4] makes the patient blow up his abdomen like a balloon so that the spleen is pushed forwards. The tense abdomen, however, militates against easy palpation. Loufty[5] used tidal abdominal percussion to detect splenomegaly, but this method must surely be unreliable especially if there is cardiomegaly, pleural effusion, hepatomegaly, gas in the stomach and ascites.

Modified method of palpation. A slightly modified method of palpating the spleen is presented, which, in the author's experience has been found to be superior to the above methods. The patient is in the recumbent position with the knees in flexion and the abdominal muscles relaxed. With the hands warmed, the 4 quadrants of the abdomen are palpated first. The patient's cooperation and confidence being obtained, the spleen is palpated with the palm of the right hand and maximally with the index finger, the left hand being placed on the loin. The patient is asked to take a deep breath without blowing the abdomen. During deep inspiration, the right hand is gently moved up towards the costal margin with minimal pressure on the abdomen. With this manoeuvre the spleen may be felt as in the conventional method. During inspiration, however, the abdomen may be tense and the spleen easily missed. At the beginning of expiration the spleen has reached the farthest point forward and the abdomen is relaxed so that it becomes much easier to feel the spleen. By gentle posterior movement of the hand the anterior edge of the spleen is felt with ease. The firm edge is unmistakable and one is unlikely to confuse it with muscle or other masses. Success with this method depends on good instruction to the patient, good posture, patience, warm hands, gentleness and slick manoeuvre at the right time. One should avoid tiring the patient as ideal conditions do not prevail under the circumstances. The method described is analagous to the dipping procedure performed in palpation of the liver or spleen in patients with ascites. It can in fact be used to palpate the liver especially when it is small and contracted as in cirrhosis. The key to palpation in this method is the dipping or flapping movement of the hand at the beginning of expiration when the spleen is furthest forward and down and the abdomen most relaxed. This procedure is in fact used unwittingly by some clinicians without their being aware of it. This communication attempts to emphasize the crucial points so that it may be used more regularly, especially in difficult cases.

SUMMARY

The importance of detecting slight enlargement of the spleen in certain clinical situations is emphasized. Some anatomical considerations are summarized and various methods of palpation of the spleen are reviewed. A slight modification in the procedure is described and its advantages mentioned.

REFERENCES

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