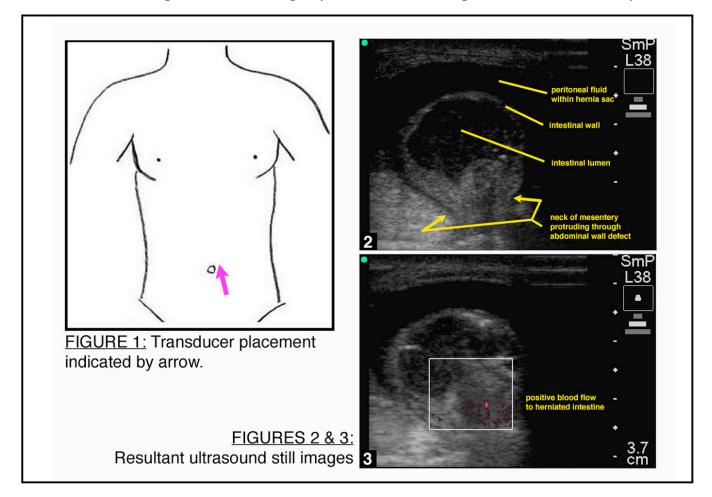
Ultrasonographic Diagnosis & Facilitated Reduction of an Abdominal Wall Hernia Mariani PJ, Department of Emergency Medicine, SUNY Upstate Medical University



OBJECTIVE:

Demonstrate the sonographic still image features of an abdominal hernia and provide real time video illustrating the dynamic anatomy during a closed manual reduction.

METHODS:

A case is reported and images provided fulfilling the objective.

RESULTS:

A 44 year old man presented to the emergency department with sudden sharp severe periumbilical pain and "bulging" that occurred on a cough while riding in an automobile. Physical exam revealed a firm tender ovoid 4 cm mass just inferolaterally to the left of the umbilicus. Bedside ultrasound with 7.5 MHz linear probe and power doppler confirmed diagnostic suspicion of abdominal wall hernia without strangulation (Figures 1-3). Following intravenous morphine and application of a cold pack to the abdominal mass, closed manual reduction was undertaken with pressure applied via both fingers and transducer under real-time video (Video). Almost immediately, the mass was felt and seen to reduce back into the peritoneal cavity. A residual small abdominal wall defect was evident (Figure 4).

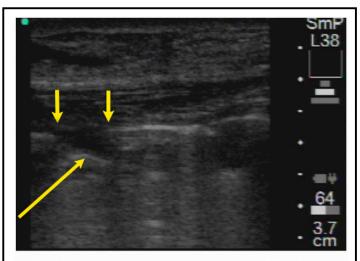


FIGURE 4: Post-reduction residual abdominal wall defect (between short arrows). An intestinal loop or mesentery floats immediately deep (long arrow).

After a period of observation wherein he remained asymptomatic and stable, the patient was discharged home with a surgical referral.