Vector Flow Imaging Compared with Pulse Wave Doppler for Estimation of Peak Velocity in the Portal Vein

The study described here investigated whether angle-independent vector flow imaging (VFI) technique estimates peak velocities in the portal vein comparably to pulsed wave Doppler (PWD). Furthermore, intra- and inter-observer agreement was assessed in a substudy. VFI and PWD peak velocities were estimated with from intercostal and subcostal views for 32 healthy volunteers, and precision analyses were conducted. Blinded to estimates, three physicians rescanned 10 volunteers for intra- and inter-observer agreement analyses. The precision of VFI and PWD was 18% and 28% from an intercostal view and 23% and 77% from a subcostal view, respectively. Bias between VFI and PWD was 0.57 cm/s (p = 0.38) with an intercostal view and 9.89 cm/s (p

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