
A dense, tapering trail of echoes distal to a strongly reflecting structure has come to be known as the “comet tail artifact.” This reverberation phenomenon is a product of marked differences in acoustic impedances between the object and its surroundings and is commonly seen at the interface between diaphragm and aerated lung, bowel wall and the gas-filled lumen, and, at times, with calcifications and their surrounding soft tissues. The clinical usefulness of the “comet tail” is manifest in such situations as displacement of the “comet tail” from the chest wall, indicating the presence of pleural effusion and identification of the “comet tail” in confirming the presence of an IUD. Representative sonograms and radiographs are provided.


The authors present four cases of omphalocele diagnosed in utero. The appearances ranged from a purely cystic mass, through a combination of cystic and solid elements to solid tissue, depending upon the contents of the sac. Continuity between the sac and the umbilical cord is characteristic of omphalocele. The thin membrane of amniion and peritoneum found in omphalocele is lacking in gastrochisis. Accompanying polyhydramnios is common, presumably due to the high incidence of associated gastrointestinal malformations such as malrotation and midgut volvulus. Other associated congenital anomalies are common as well, cardiac defects having been reported in 20% of infants with omphalocele. In the case of a ruptured omphalocele, the distinction from gastrochisis may be difficult at best. The presence of polyhydramnios or of elevated amniotic fluid alphafetoprotein should prompt a sonographic search for omphalocele as well as other gastrointestinal abnormalities and neural tube defects.

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Erratum

In the article entitled “The Derivation of the Gamma Variate Relationship for Tracer Dilution Curves,” October 1983, pp. 945–948, two corrections should be noted.

On p. 947, the third and fourth sentences of the second paragraph are transposed. The middle section of the paragraph should read:

“From Eq. (15) we see that \( \beta \) is the ratio of the volume of a theoretical mixing chamber to the rate of flow. It has dimensions of time, and can be thought of as the time required to empty a theoretical mixing chamber at a given flow rate.”

In the fourth line of Equation 32 on p. 947, the exponent in the denominator should read \( \alpha_1 + \alpha_2 + 2 \).