Endoscopic ultrasound (EUS) is now well established as an important tool in assessing esophageal cancer. We have previously described the role of the Olympus MH-908 blind esophagoprobe in safely and accurately staging patients with esophageal cancer, including those with high-grade stenoses [1]. Accurate assessment of the level of the tumour with reference to the incisor teeth provides useful information to the surgeon and the oncologist. This can be provided by either endoscopic examination or EUS. The purpose of this report is to describe a discrepancy in these levels, particularly regarding the blind esophagoprobe (MH-908).

A magnified view of the tip of the Olympus MH-908 esophagoprobe is shown in Figure 1. As can be seen, the centre of the ultrasound transducer is approximately 2.5 cm proximal to the tip. Therefore, when assessing levels of lesions with this echo endoscope a correction should be made. For example, a tumour apparently beginning at 35 cm from the incisor teeth on endosonographic examination actually begins at 32.5 cm.

A similar but smaller discrepancy is apparent with the Olympus UM-20 echoendoscope, which is also routinely used to assess less stenotic esophageal cancers. The middle of the ultrasound transducer is approximately 19 cm from the 20 cm marker. Therefore, when assessing esophageal lesions, we correct our levels by 1 cm when using this probe.

The purpose of this report is to make endosonographers aware of these discrepancies and to adopt “corrected” measurements, particularly when using the MH-908. This is particularly relevant when EUS is used to assist radiotherapy planning. We use a 2.5-cm correction for the Olympus MH-908 and a 1-cm correction for the Olympus UM-20. We recommend that clinicians using similar equipment measure their own EUS probes and correct appropriately.

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Figure 1 A magnified view of the tip of the MH-908.

References

1 Bowrey DJ, Clark GW, Roberts SA et al. Endosonographic staging of 100 consecutive patients with esophageal carcinoma: introduction of the 8 mm esophagoprobe. Dis Esophagus 1999; 12: 258 – 263

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