A Simple and Safe Method of Transcutaneous Gastrostomy Replacement Using the Seldinger Technique

We report on a simple and safe method of transcutaneous gastrostomy (percutaneous endoscopic gastrostomy; PEG) replacement using the Seldinger technique in combination with vascular dilators. The procedure is illustrated in Figure 1 and 2.

We replaced 12 PEGs in eight patients over a period of 12 months. The median age of the patients was 36 years (range 23–88). The leading diagnosis in all patients was an underlying neurological disorder. In nine episodes the PEG had been accidentally removed. In three cases it had to be replaced because of malfunction, and the old PEG was removed using the “cut and push” technique [1]. Patients presented after a median delay of 17 hours (range 16–24). In ten cases the size of the replacement PEG was identical to or larger than that of the old one (14 Fr in eight patients and 10 Fr in one patient; enlarged from 9 Fr to 12 Fr in one patient). In two cases the replacement PEG was smaller than the original one. In eight of the 12 patients the replacement was carried out as an outpatient procedure. The procedure was well tolerated, and no long-term complications were observed.

The Seldinger technique of PEG replacement was first reported in four cases of surgically created gastrosomies [2] but has not become widely accepted. Transcutaneous PEG replacement has also been described using Savary-Gilliard dilators (three cases) and Hegar’s dilators (eight cases) [3,4]. This blind approach to dilation carries the potential risk of creating a false passage. The Seldinger technique has the advantage of preventing this by using the guide wire. This gives the replacement PEG more stiffness and makes replacement easy and atraumatic. Transcutaneous PEG replacement should be used with great care in patients with gastrosomies less than 4 weeks old. Fluoroscopy can confirm correct positioning of the wire under these circumstances.

References

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