

Unexplained diarrhea in a patient with a percutaneous endoscopic gastrostomy (PEG) tube

UCTN

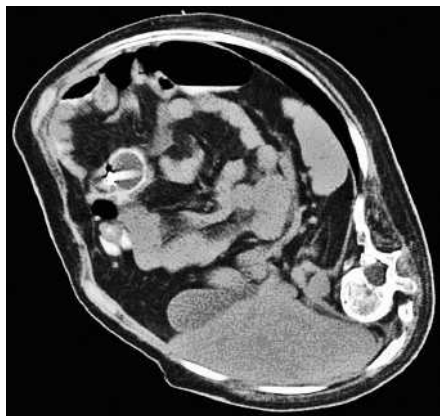


Figure 1 Computed tomographic scan of S.L.'s abdomen, showing the percutaneous endoscopic gastrostomy balloon in the colon.

S.L. has Rett syndrome, which is caused by mutations in the *MECP2* gene on the X chromosome. (For further information on Rett syndrome, see the International Rett Syndrome Association website, www.rettysyndrome.org, and the Rett Syndrome Research Foundation website, www.rsrf.org.) Early development is normal in children with Rett syndrome, but there is then loss of purposeful limb use, and the development of distinctive hand movements, seizures, and mental retardation; they can also develop scoliosis and other anatomical deformities. S.L.'s first percutaneous endoscopic gastrostomy (PEG) was placed in April 2001, inserted medially because of her physical deformities, and she made a good recovery.

A replacement balloon PEG was inserted in April 2005 to avoid the need for further endoscopies. S.L. started having severe diarrhea. Her full blood count, renal, liver, and thyroid function, clotting screen, and vitamin B₁₂ and folate levels were all normal. Stool and blood cultures were negative. S.L.'s feeds were changed but this did not help. Her PEG was replaced in May 2005 via a guide wire. It was flushed and seen to be functioning. However, the diarrhoea continued. Abdominal computed tomography and a tubogram were performed. The computed tomographic scan suggested that the PEG tube was in the transverse colon (Figure 1) and this was confirmed by the tubogram – con-



Figure 2 Tubogram showing contrast mainly in the colon, with tracking to the stomach via a fistula.

trast was seen entering the large bowel, with a fistula into the stomach (Figure 2). S.L. was then fed via a nasogastric tube, and the diarrhea stopped. Her PEG was reinserted in September 2005, when placement in the transverse colon was ruled out by applying suction on the needle on withdrawal from the stomach. S.L. remained stable after this procedure.

We believe the first PEG tube had gone through the transverse colon into the stomach, and that the replacement tube had ended up in the transverse colon. The patient survived by retrograde flow of the feed from the transverse colon, through the fistula, into the stomach. This case shows that even if a PEG tube is inserted endoscopically, there may be unexpected changes in the anatomy. Careful consideration should be given to determining the position of the PEG tube, so assuring the safety of surrounding organs.

Acknowledgments

We would like to thank S.L. and her family. We are also grateful to consultant radiologist, Dr. William Saywell and the Radiology Department of Yeovil District Hospital.

Endoscopy_UCTN_Code_CPL_1AH_2AI

K. Tong, Z. Khan

Yeovil District Hospital, Yeovil, Somerset, United Kingdom.

Corresponding author

K. Tong

Yeovil District Hospital
Yeovil BA21 4DT
Somerset

United Kingdom

Fax: +44-1935-426850

Email: ms983772@yahoo.co.uk