# Spontaneously closed gastrocutaneous fistula becomes symptomatic after 30 years with pregnancy

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## **Summary**

Percutaneous endoscopic gastrostomy (PEG) is the standard procedure of choice for the provision of enteral nutrition in children who require long-term nutritional support. Removal of gastric tubes has a risk of causing gastrocutaneous fistula and this complication is dealt within childhood. The authors report a 34-year old woman who had a PEG procedure at the age of four years due to caustic esophageal injury and recovered without incident. Thirty years later she becomes pregnant and as her pregnancy progresses, her former fistula opening becomes more obvious and at the 34<sup>th</sup> week of the pregnancy she presents to the hospital with fistula. After a successful delivery, the fistula was evaluated and repaired surgically.

Key words: Gastrocutaneous fistula; PEG; Gastrostomy; Enteral nutrition.

## Introduction

Gastrocutaneous fistula is a serious yet unusual surgical complication which received little attention in recent literature. Isolated gastrocutaneous fistulae are rare and most commonly occur in the fundic portion of the greater curvature of the stomach. Most common causes are unrecognized iatrogenic injury, severe left upper quadrant inflammation, and external drainage [1].

Percutaneous endoscopic gastrostomy (PEG) is the standard procedure of choice for the provision of enteral nutrition in children who require long-term nutritional support [2]. Removal of gastric tubes has a risk of causing gastrocutaneous fistula [2-4]. The prevalence of this complication varies between centers and with the insertion technique used. For open Stamm procedure, it varies between 18-45%, whereas for endoscopic insertion, it is between 24-28% [5].

Risk factors affecting spontaneous closure of gastrocutaneous fistulae are poorly understood. There are some studies that report that the time of removal of the tube is the only important factor, and removing the tube within eight months has a good chance for spontaneous closure of fistula [6, 7].

# **Case Report**

Here the authors report an unusual case of a 34-year-old woman who had an open Stamm gastrostomy 30 years prior due to caustic esophageal injury. Gastrostomy tube was removed after two months and the fistula spontaneously closed within two days. The site of fistula remains as a scar and for the next 30 years patient never had any problems until her pregnancy. As the patient's preg-

nancy progresses, her former fistula opening becomes more obvious and at the 34th week of the pregnancy, she presents to the hospital with fistula. The patient's complaint was the expulsion of all the liquids she took through the fistula. The patient did not have any problem with solid foods. The decision was not to intervene until the end of the pregnancy. Two weeks later, after an uneventful delivery by cesarian section, a fistulography was performed to evaluate the fistula. Fistulography revealed a fistula between skin and the corpus of the greater curvature of the stomach. Surgical closure of the fistula was decided. Operation started with laparotomy. Site of fistula opening was removed with an eliptic incision and gastric wedge resection was performed (Figure 1). The patient did not have any problem during the follow up and was discharged.



Figure 1. — *Gastrocutaneous fistula isolated during operation*.

### **Discussion**

This is a unique case as a closed gastrocutaneous fistula recurred after 30 years and pregnancy was the cause. To the present authors' knowledge, this is the only case in literature where pregnancy is the cause of a recurring gastrocutaneous fistula.

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