



# Abomasal cannulation in the milk-fed calf using a polyurethane tube designed for the percutaneous endoscopic gastrostomy (PEG) tube technique

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## Abstract:

The main objective of this study was to develop a simple and effective surgical technique for abomasal cannulation in neonatal calves. General anesthesia was induced in twelve 3-day-old male dairy calves and a polyurethane cannula surgically implanted in the abomasal body ( $n = 12$ ) and pyloric antrum ( $n = 6$ ) through a right paracostal incision. Fifteen cannulae remained in situ from day 3 to 34 of life (mean 29 days), and 3 cannulae were extruded 13 to 14 days after placement. Calves were clinically healthy and gained weight during the study. Cannulae were well tolerated by the calves and abomasal contents did not leak from the cannula sites. Necropsy examination revealed firm adhesions between the abomasum and parietal peritoneum at the cannula sites with no evidence of leakage or peritonitis. We conclude that surgical placement of polyurethane tubes designed for percutaneous endoscopic gastrostomy provided a useful method for cannulation of the abomasum of neonatal calves. The cannulation technique can be used for experimental studies, as well as for nutritional and fluid support of sick calves that cannot be managed by oral treatment.

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