

# Successful pregnancy after abdominoperineal resection for rectal carcinoma in a young patient

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### Introduction

Rectal carcinoma is rare in young patients under twenty years of age, consisting of only 1% of colorectal carcinomas at all ages [1,2]. Abdominoperineal resection is known to cause sexual dysfunction and reduced quality of life. We report a case of successful pregnancy and more than ten years of disease free survival following abdominoperineal resection for rectal carcinoma in a teenage female.

### Case

A 19 year old female presented with bleeding per rectum. She also had symptoms of distal large bowel obstruction. A growth arising from the anterior wall of the rectum was found on digital rectal examination. Colonoscopy and biopsy revealed a moderately differentiated adenocarcinoma and abdominal scan showed no evidence of liver metastasis. The patient did not give a history suggestive of any predisposing conditions leading to colorectal carcinoma at young age.

An abdominoperineal resection was planned and at surgery there was local infiltration of the tumour to the posterior vaginal wall with no peritoneal or liver metastasis (Dukes B). A cuff of posterior vaginal wall was removed with the tumour. Post operative period was uneventful.

Two years after surgery she became pregnant and delivered a healthy baby by caesarean section. At the 10th year of follow up there is no evidence of local or distal recurrence.

### Discussion

The proportion of rectal carcinoma in patients below 20 years is in the order of one percent of all colorectal carcinomas [1]. Colorectal carcinoma is associated with poor prognosis in young people due to the common occurrence of mucinous carcinoma, late presentation and because of rarity of disease the symptoms are ignored and the diagnosis is delayed and it is at an advanced stage at presentation [2,3].

Common modes of presentation are bleeding per rectum and abdominal pain and our patient also presented with above symptoms [3]. The five year survival after Dukes' B carcinoma is about 70% [4]. Local recurrence rates vary between 2 - 25% and seem to occur with equal frequency after sphincter saving resection and abdominoperineal resection [5].

Abdominoperineal resection results in many alterations which affects fertility and successful pregnancy. Also there are complications due to permanent colostomy during pregnancies. During abdominoperineal resection there can be damage to hypogastric plexus. Scarring and distortion of pelvis also results. These factors affect the success in ovulation, fertilisation and implantation of embryo. In addition psychological factors like presence of stoma and reaction to illness affects fertility. Distortion and scarring of perineum, impaired lubrication, orgasm and dyspareunia makes sexual functions difficult, thus pregnancy [6]. Women with colostomy develop complications during pregnancy like intestinal obstruction [7]. Despite many of these difficulties our patient had a successful pregnancy and delivered a healthy baby by caesarean section.

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