

# Concomitant Squamous Cell Carcinoma of the Cervix and Adenocarcinoma of the Rectum

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## Introduction

Multiple primary cancers are rare and its first description was made by Billroth in 1879<sup>1</sup>. Recently, this condition has been detected with increasing frequency<sup>2</sup> which may be explained by improved clinical awareness, contribution of other factors including carcinogenic effect of radiation, new environmental carcinogenic factors and also increased life expectancy of cancer patients to enable them to live long enough to develop a second primary cancer<sup>1,3,4</sup>. Most secondary tumours develop after a period of time, which may last for years<sup>1,3,4</sup>. However, two or more primary malignant tumours may be found concomitantly in a patient. We report a case with concomitant squamous cell carcinoma of the cervix and adenocarcinoma of the rectum identified incidentally in an operation performed for carcinoma of the uterine cervix.

## Case Report

A 47 year old woman, gravida 6, para 4, presented with 2 months history of a malodorous vaginal discharge and postcoital bleeding. On pelvic examination, an exophytic bleeding lesion measuring 1x2x1.5 cm in diameter was seen on the upper lip of the cervix. The size of the uterus and both adnexal regions were normal. No abnormality was found with digital examination of rectum. Cervical punch biopsy and endocervical curettage (ECC) was performed and pathologic diagnosis was squamous cell carcinoma of the cervix. Endocervical curettage findings were negative. After pelvic examination, colposcopic examination of cervix and vagina, colposcopically directed punch biopsy, endocervical curettage (ECC), intravenous pyelography (IVP), barium enema and ultrasound (USG) were done and the diagnosis was Stage I squamous cell carcinoma of cervix. She was prepared for surgery and at laparotomy, samples from para-aortic lymph nodes were obtained for frozen-section which showed no evidence of malignancy, therefore, a type 3 extended hysterectomy was performed. When the peritoneum of the back of the uterus was dissected, a firm mass, 2x3x3 cm in diameter was identified in the rectosigmoid region. Therefore, the patient was simultaneously operated by a general surgeon. The mass involving rectosigmoid region was resected and the frozen section showed that it was a primary adenocarcinoma of the rectum. After end-to-end anastomosis of rectum type 3 extended hysterectomy, pelvic and para-aortic lymph adenectomy were performed. Histopathological examination of specimen showed that adenocarcinoma of the rectum was grade 2 and invasion was limited to rectal wall with no evidence of serosal involvement, the surgical limits of the specimen were free of cancer cells. Squamous cell carcinoma of the cervix was grade III and limited to endocervix. All of the 39 lymph nodes obtained during operation were histologically negative for metastasis. The patient had post-operative radiotherapy. She has been followed with 3 months' intervals. Her follow-up over 30 months including pelvic examination, vaginal smear, chest film, 1W, biochemical tests for liver and kidney, USG, rectoscopy, bone scanning and computed tomography of upper abdomen and pelvis did not show any recurrence.

## Discussion

Multiple primary malignant tumours in patients with cancer are uncommon with a 3-3.6% frequency seen on autopsy<sup>4-6</sup>. Although it is rare to find more than three separate primary cancers in one individual<sup>7</sup>, there were a few patients who had six or more primary cancers<sup>4-8</sup>. A review of literature has shown that cancers in these patients were predominantly gastrointestinal in origin and most of them had a family history of cancer<sup>4,7,9</sup>. The necessary criteria for diagnosing multiple primary tumours were defined by Warrens and Cates<sup>10</sup> which conclude that each primary tumour must present its own definitive malignant pattern, each must be distinct and the probability of metastasis must be excluded. Recently, multiple cancers have been identified with increasing frequency<sup>2</sup> and this may be explained by several factors<sup>1-4</sup>. Arai et al.<sup>3</sup> showed that there is evidence of second cancer development after radiation therapy for cancer of the uterine cervix. Their results suggested that there was no significant increase in the risk of second primary cancers when all sites were combined but if the assessment was done on site by site basis, significant increase was noted for the rectal cancer, leukemia and bladder cancer after radiotherapy. A significant excess of second cancers was found within the organ system within the irradiation field but not outside the field, the excess of rectum cancer began with the 2 to 5 years period after exposure and increased with time. Chemotherapy is reported to increase the risk of second cancers especially in leukemia and bladder cancers<sup>11-13</sup>. Other factors contributed to the detection of second cancers are increased clinical awareness of this condition, new environmental factors and increased life expectancy of cancer patients<sup>1,3,4</sup>. To our knowledge, multiple primary cancers found concomitantly are uncommon and mostly develop after a period of time. The patient presented here does not have a family history nor a history of radiotherapy or chemotherapy and the diagnosis of cervix and rectal cancers was done at the same time.

## References

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