

# Synchronous double malignancy: Adeno-Carcinoma of Caecum and Renal Cell Carcinoma

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## Abstract

Synchronous double malignancies involving different organs are relatively rare and uncommon finding except in skin and colon. We report an interesting case of double malignancy in which a patient exhibited two separate carcinomas, carcinoma of caecum and renal cell carcinoma. Patient was a 40 year male who presented primarily with symptoms pertaining to the gastrointestinal tract and renal cell carcinoma was detected incidentally during investigations.

## INTRODUCTION

The occurrence of another malignancy of different organ in a patient with a known malignant tumour is known as double malignancy. It is quite reasonable to assume that when the same tissue in same person is exposed to some carcinogenic agent, several areas of malignant change in different organs may develop. This tendency is obvious with regard to skin and colon but not much is known about tumours involving two different organ systems simultaneously. We report a case of synchronous double malignancy involving the kidney and the colon.

## CASE REPORT

A 40-year-old male presented with three months history of intermittent abdominal pain and features suggestive of sub-acute intestinal obstruction. On examination a hard lump of 8×10 cm size with irregular surface was palpable in right iliac fossa. Ultrasonography showed the mass arising from ileocaecal region and rest of the abdominal cavity with liver was normal. His haematological investigations, renal and liver functions were within normal limit. X-ray chest was also normal. A provisional diagnosis of carcinoma of the cecum was made and a CAT abdomen was obtained. CAT scan of the abdomen revealed a mass arising from cecum suggestive of Carcinoma of the cecum and an incidental finding, i.e., a mass lesion in lower pole of right kidney which was enhancing on contrast, suggestive of renal cell carcinoma.

On exploration, there was a large mass present in ileocaecal area with few regional lymph nodes enlarged for which

classical right hemicolectomy was performed. Right radical nephrectomy was done for right renal cell carcinoma (RCC) after palpating the lesion per-operatively. Cut section of the resected gut and nephrectomy specimens revealed gross features of Ca caecum and RCC. Histopathology showed adenocarcinoma of the caecum and renal cell carcinoma respectively in the specimens of right hemicolectomy and right kidney.

## DISCUSSION

As the study of oncology has advanced over recent years, it has become increasingly apparent that malignant disease is not the result of predictable patterns always, but unknown constitutional factors also determine the susceptibility of any given tissue to develop malignancy following exposure to various carcinogenic agents. It is quite reasonable to assume that when different tissues in same individual are exposed to same carcinogenic agent, several areas of malignant change may develop. This tendency is obvious with regard skin and colon. Since Billroth published the first report of multiple primary malignancy in 1869<sup>1</sup>, numerous reports of multiple carcinomas of large gut, arising simultaneously or as interval carcinomas, have been published.<sup>2</sup>

The occurrence of another malignancy of different organ in a patient with known malignant tumour is known as double malignancy. There is another term i.e. second cancer, which is used for malignancy of different organ which occurs after treatment of primary, probably due to side effect of radio/chemo-therapy used in the treatment of primary lesion. The classical example of second cancer is development of

carcinoma in contralateral breast following use of radiotherapy for breast cancer treatment.<sup>3</sup> Certain criteria have been laid down to diagnose double malignancy. In order to make the diagnosis of a second primary malignant neoplasm, each tumour should be separate from the other, each should be malignant, and neither should be a metastasis from the other, i.e., microscopic and morphologic features of the two tumours must be entirely different.<sup>4</sup>

Few cases of double malignancy have been reported in literature. One case was reported from Japan, who was having synchronous adenocarcinoma of lung and malignant astrocytoma of brain following exposure to asbestos.<sup>5</sup> This patient died of cerebellar herniation induced by brain tumour and autopsy proved malignant astrocytoma in the brain and coincidental alveolar carcinoma in the lung. Another case from India was having squamous cell carcinoma of lung and rhabdomyosarcoma of scapula in a 90 year old male.<sup>6</sup> Our case was having clinical features primarily because of adenocarcinoma of caecum and second primary, i.e., RCC was diagnosed on CT scan of abdomen.

Treatment strategies in cases of double malignancy depend on treating the malignancy that is more advanced first, or sometimes both malignancies could be treated simultaneously, if therapeutic option is same for both. In our case both the diseases were surgically amenable and were treated by right hemicolectomy and right nephrectomy in a

single sitting.

The case is being reported because of unusual presentation of two different malignancies simultaneously without any obvious risk factor and at a comparatively younger age.

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