

# BILATERAL DERMOID TUMOUR OF THE OVARY WITH PRIMARY CARCINOMA OF THE LUNG

(A Case Report)

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## Introduction

It is well known fact that secondary tumours of the lung are more common than primary. Blood borne metastatic deposits in the lung may be derived from the malignant disease almost anywhere in the body. A primary carcinoma in any organ, particularly in the breast, kidney, uterus, ovary, testis, thyroid or in the lung itself may give rise to pulmonary metastatic deposits. The secondary deposits are usually multiple and bilateral. Haemoptysis occur in some cases and often there are no symptom and the diagnosis is done by radiological examination. Extensive infiltration of pulmonary lymphatics by tumour may develop in patients with carcinoma breast, stomach, pancreas or bronchus, thus condition is known as—"pulmonary lymphatic carcinomatosis", causes several and rapidly progressing dyspnoea.

The case reported here is a rare association of presence of asymptomatic bilateral dermoid cyst in ovary and primary lung malignancy.

## CASE REPORT

Mrs. L., 60 years Hindu female was admitted to the Department of General Medicine, M.Y. Hospital, Indore on 4th March 1980 with the main complaints of cough with expectoration, streaks of blood in sputum occasionally and breathlessness for the last 3 weeks. Patient had low grade fever 2 days prior to admission.

M/H—Menarche started at the age of 13 years, with regular, moderate, painless menstruation lasting for 4-5 days. Patient developed menopause since last 12 years.

O/H—Patient had only 1 full term male child 30 years old. This pregnancy occurred 15-years after her marriage. No conception occurred thereafter.

On general examination, patient was obese, pulse 80 per minute, respiration 30 per minute, blood pressure 130/90 mm.Hg. There was no associated anaemia, pedal oedema or cyanosis. Heart—N.A.D., Lungs—coarse crepitations all over the chest. Abdomen—Soft, no ascitis, a mobile solid lump was palpable 15 x 10 cms. size arising from pelvis occupying hypogastric region. A provisional diagnosis of miliary tuberculosis was made. Gynaecological check up revealed PS—N.A.D., PV—Cervix was downwards and backwards uterus was anteverted, anteflexed, firm, normal size. A mobile cystic lump was palpable in left fornix 15 x 10 cms. in size, not tender, right ovary was also palpable.

## Investigations

Hb.—9 gm%, T.W.B.C.—7,800/cu.mm., P 50%, L 39%, E 4%, ESR—63 mm. in first hour. Sputum—negative for A.F.B., cytology of sputum demonstrated cells of well differentiat-

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ed papillary adenocarcinoma of lung. X-ray chest, demonstrated homogenous dense shadow in middle lobe of right lung with miliary carcinomatosis and cotton wool appearance both lung fields (Fig. 1).

Bronchoscopy was carried out, both bronchi were patent, did not reveal any intramural growth, so the diagnosis of bronchoalveolar carcinoma with scattered metastasis in both lungs was made.

In view of the gynaecological and sputum cytology findings, a provisional diagnosis of ovarian tumour with secondaries in lungs was made and an exploratory laparotomy was carried out on 20th March 1980. Uterus was of normal size, left ovary was enlarged cystic 20 x 15 cms. of size, right ovary was also enlarged 5 x 3 cms. size. Pan-hysterectomy was done. Stomach, liver, omentum were examined, they were normal. Post-operative period remained uneventful.

#### Histopathology Report

Uterus normal in size and appearance. Endometrium was in oestrogen phase, senile atrophy of body of uterus, cervix showed endocervicitis with nabothian follicle. Both ovaries showed bilateral benign dermoid tumour. Several sections from cyst wall were studied, there was no evidence of malignancy (Fig. 2).

In view of the histopathology report a final diagnosis of bilateral dermoid tumour of ovary with primary lung malignancy was made and patient was sent to the Department of Radiotherapy for the treatment of primary malignancy of the lung.

#### Discussion

Dermoid cyst results from largely ectodermal differentiation of totipotential germ cells. They affect slightly older age group more than other tumours of germ cell origin, usually developing during reproductive life. Dermoid cysts are nearly always benign and cystic. Malignant changes have been recorded as occurring in 1-3 per cent of cases. Novak (1974) has reported the figures upto 5 per cent. Peterson (1956) reported that 75 per cent

of dermoids were 10 cms. or less, while fewer than 4 per cent were more than 20 cms. in diameter. They are bilateral in 15-20 per cent of cases.

In the case presented, there was no evidence of malignancy in the ovarian tumour. Patient was unaware of the ovarian tumour and it was asymptomatic. She was admitted in the medical unit as her main complaints were dyspnoea and haemoptysis. X-ray chest was helpful in diagnosis, which was first thought to be miliary tuberculosis and repeated cytology of sputum by deep coughing was a conclusive diagnostic procedure. Bronchoscopy revealed normal broncheal tree and was concluded that primary tumour in lung must be arising from terminal bronchioles and alveoli. The papiliferous adenomatous lesions are more common in female than in males, while typical bronchoalveolar carcinoma more common in males with history of smoking.

#### Summary

A case of primary lung malignancy with bilateral dermoid tumour of ovary is reported.

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See Figs. on Art Paper III