Bilateral Thoracotomy for Hodgkin's Disease Involving the Hilar Nodes

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A patient with Hodgkin's disease of the left and right hilar lymph nodes is described. The treatment was radical excision through bilateral thoracotomy followed by intensive radiotherapy. Follow-up 27 months after treatment has revealed no recurrence.

Hodgkin's disease may be classified into four stages according to its clinical manifestations. It is a common cause of mediastinal enlargement and histologically it is represented by three main groups. Both the clinical stage and the histologic picture must be taken into account when considering the form of therapy.

Radical surgery, irradiation and chemotherapy, either singly or combined, are the methods used in treatment. However, there is still some controversy concerning the treatment of choice of Hodgkin's disease when it is in the localized form.

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CASE REPORT

In August, 1967, a 21-year-old girl was admitted to the medical ward with the complaint of a "prickling sensation" in the chest, weakness, and loss in weight of 4 kilograms in the previous three months. A chest x-ray film taken before admission showed bilateral follicular masses in the mediastinum. A chest x-ray film taken before admission showed bilateral follicular masses in the mediastinum (Fig 1).

On physical examination her general condition appeared to be good. The only abnormal clinical findings were small "elastic" glands in both axillae and inguinal regions. Routine laboratory tests including PBI, tuberculin test and bone marrow biopsy gave normal results. Biopsy of an inguinal lymph node showed an intact struchure with some fibrosis, and fibrotic thickening of the capsule. The clinical impression was that of bilateral hilar Hodgkin's disease. It was decided, therefore, to perform thoracotomy to clarify the diagnosis and to resect the tumor if possible.

The patient underwent right thoracotomy on September 13, 1967. The right lung was in good condition; the hilum of the lung was occupied by large lymphatic glands of varying consistency. A large mass lay on top of the ascending aorta; a second lay behind, between the right bronchus and the superior vena cava, displacing the azygos vein to the right and upwards. The masses were radically resected without sacrificing essential tissue.

The histologic examination of the lymph glands revealed a picture of Hodgkin's granuloma, mixed type (Fig 2).

The patient made a good recovery from the first operation (Fig 3), and two weeks later, left thoracotomy was done. Findings on the left were similar to those of the first operation. A mass, as large as a fist, was found lying on the pulmonary artery. It continued across the arch of the aorta. Another gland, 2x3x4 cm in size, was found beside the...
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FIGURE 2. Top: Photograph of nodules removed from right hilar region. Bottom: Photomicrograph showing infiltration of a polymorphic nature with typical Reed-Sternberg cells. Some mitoses are also present. (H and E ×40).

thymus which itself was not involved. Again, all these masses were removed leaving the lung intact. The postoperative course was uneventful and the histologic picture was identical to the previous one. Two weeks later the mediastinum was irradiated with 4000 r and treatment with Vinblastin started. Initially the dose was 6 mg at weekly intervals and later it was reduced to 5 mg. Today, 27 months after surgery, there are no signs of recurrence of the disease, and routine laboratory tests including x-ray films of the chest, show normal findings (Fig 4).

DISCUSSION

It has been shown that the rate of long term survival is higher in patients with localized Hodgkin's disease than in those with the generalized form.7 Recently, various studies indicated that the localized form of Hodgkin's disease with the histologic pattern of nodular sclerosis or lymphocyte predominance is associated with a higher percentage of long term survivals.6,9

The study of Slaughter et al10 suggested that the treatment of choice in Hodgkin's disease confined to the cervical nodes is radical dissection followed by x-ray irradiation. In fact, the dose of irradiation his patients received postoperatively was well below that recommended today for the treatment of localized disease.5 This may indicate that the definitive or effective treatment in his cases was due to surgery.

The study of Bourke et al11 suggests that Hodgkin's disease of the mediastinum is also best treated by a
combination of surgery and radiation therapy. According to the revised classification of Hodgkin’s disease, our patient was in stage II B (disease limited to two contiguous anatomic regions on the same side of the diaphragm. Presence of systemic symptoms).

To the best of our knowledge, definitive treatment of bilateral hilar Hodgkin’s disease by surgical excision using a method of double thoracotomy followed by radiotherapy has not previously been described.

The follow-up of 27 months so far is too short to evaluate this method of treatment. However, judging from the results of a similar approach in the treatment of Hodgkin’s disease by others, the method adopted in our patient appears to be rational.

ADDENDUM
Since this article was submitted, routine gastrointestinal and renal x-ray studies were performed which did not show abdominal or retroperitoneal Hodgkin involvement.

REFERENCES

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Aspiration Pneumonitis—The Sequelae*

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The pulmonary status of a 28-year-old woman who aspirated fluid during general anesthesia was reviewed for the subsequent 163 days. Sequelae of ventilation/perfusion ratio inequality, increased physiologic dead space to tidal volume ratio, and interstitial fibrosis were demonstrated by physiologic and radiologic studies.

The sequelae of aspiration of gastric fluid appears to be less benign in those patients who survive, than previously described. The pathophysiologic changes shortly after such aspiration have been adequately documented. The following case not only illustrates changes during the acute phase, but also presents evidence for subsequent changes in the lung, consistent with interstitial fibrosis and increased ventilation/perfusion ratio inequality.

CASE REPORT
A 28-year-old primigravida, was admitted to another hospital in active labor with cephalo-pelvic disproportion. After 12 hours without progress of labor, cesarian section was scheduled.

The history and physical examination were non-contributory, and a chest radiograph during the second trimester was normal. There had been no oral intake for the 12-hour period prior to surgery. General anesthesia was administered because the patient refused a spinal anesthetic. Considerable difficulty was encountered in placing the endotracheal tube, and during this period, the patient aspirated gastric contents. Ventilation became progressively more difficult, and pink, frothy fluid was suctioned from the trachea and bronchi. Auscultation revealed rales over both lungs and a diagnosis of aspiration pneumonitis was made. Treatment was initiated with the intravenous administration of hydrocortisone sodium succinate (Solu-Cortef) and crystalline penicillin G. After stabilization, the patient was transferred to the Bexar County Hospital—The University of Texas Medical School at San Antonio, with an endotracheal tube in situ. Oxygen was administered via a “T” piece.

A chest radiograph (Fig 1) was consistent with a diagnosis of aspiration pneumonitis.

Following tracheostomy, ventilation was continued with a