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Spontaneous Rupture of Middle third of the Esophagus

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Spontaneous perforation of the esophagus is due to a sudden increase in intrabdominal pressure with explosive espulsion of a large amount of gastric contents into relaxed esophagus. Usually (in 95 %) the tear occurs in the left posterolateral aspect of the distal esophagus. This disease is not a common one, but this presenting case is even more interesting because of the rarity of perforation on right posterolaterial aspect of the middle third of the esophagus.

CASE REPORT

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68 years old male was admitted to pars General Hospital with severe chest pain. Four hours prior to his admission had a heavy meal and a few drinks and provoked vomiting, then had immediately experienced severe chest pain radiating to right shoulder and scapular region. Physical examination revealed apprehensive male sitting in the bed and gasping for air, with sweaty cold and pale color and cyanotic extremities, blood pressure 90/65, pulse 140/minute. Heart was regular and rapid. Lungs were clear. Right supraclavicular subcutaneous emphysema was noted. Liver was 2 fingersbreaths below costal margin but not tender, no splenomegaly, no edema. ECG revealed sinus tachycardia of 140/minute. He had a long standing history of mental depression and hypertension. He was a heavy smoker and drinker.

Up right P.A. chest X Ray reveal slight pleural effusion on right costophrenic angle and free air in the right side of the mediastimum (Chest X-Ray Fig I) Barium swalow was not impressive but in reprospect the area of dentation corolates with the site of perforation Fig II, III.

The patient was prepared for surgery. Right thoractomy performed and mediastinal esophague approached. There was small amount of free fluid and edema of periesophageal tissue. Approximately 11/2 - 2 centimeter longitudinal full thickness, sharp edged tear was located in right posterolateral aspect of middle third of the esophagus. The edges were so sharp and fresh that did not require any debridment. Tear was closed in layers with interrupted No. 3-0 silk sutures. Mediastinal pleural was tacked over the repair and the rest of the mediastinum was left open for drainage. Chest closed after insertion of a chest tube. A gastrostomy was performed for gastro-intestinal decompression.

Postoperatively the patient was rapidly recovering for 2 days, but the third postoperative day complicated by gastric hemorrhage. Continuous gastric conoling and drainage through gastrostomy tube and intermitant maalox and milk regiment through gastrostomy tube and several pints of blood transfussions were established. On the sixth postoperative day gastric

bleeding stopped completely. Chest tube was removed and oral feeding was strated. Patient's hospital stay was prolonged by empyema (Fig IV) and an acute bout of psychosis. Patient was discharged 34 days after the operation in good condition.

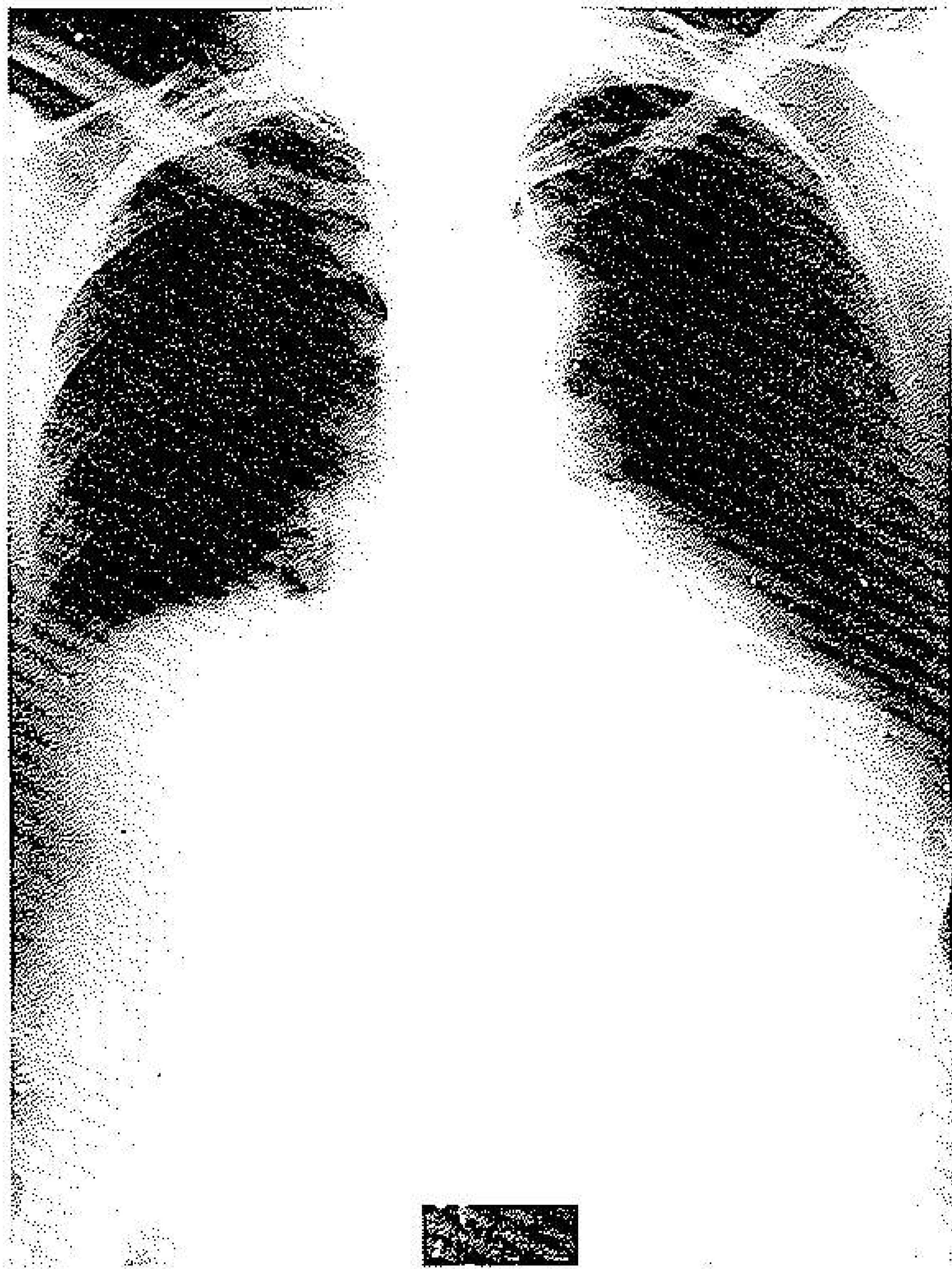

Fig 1

Fig 2

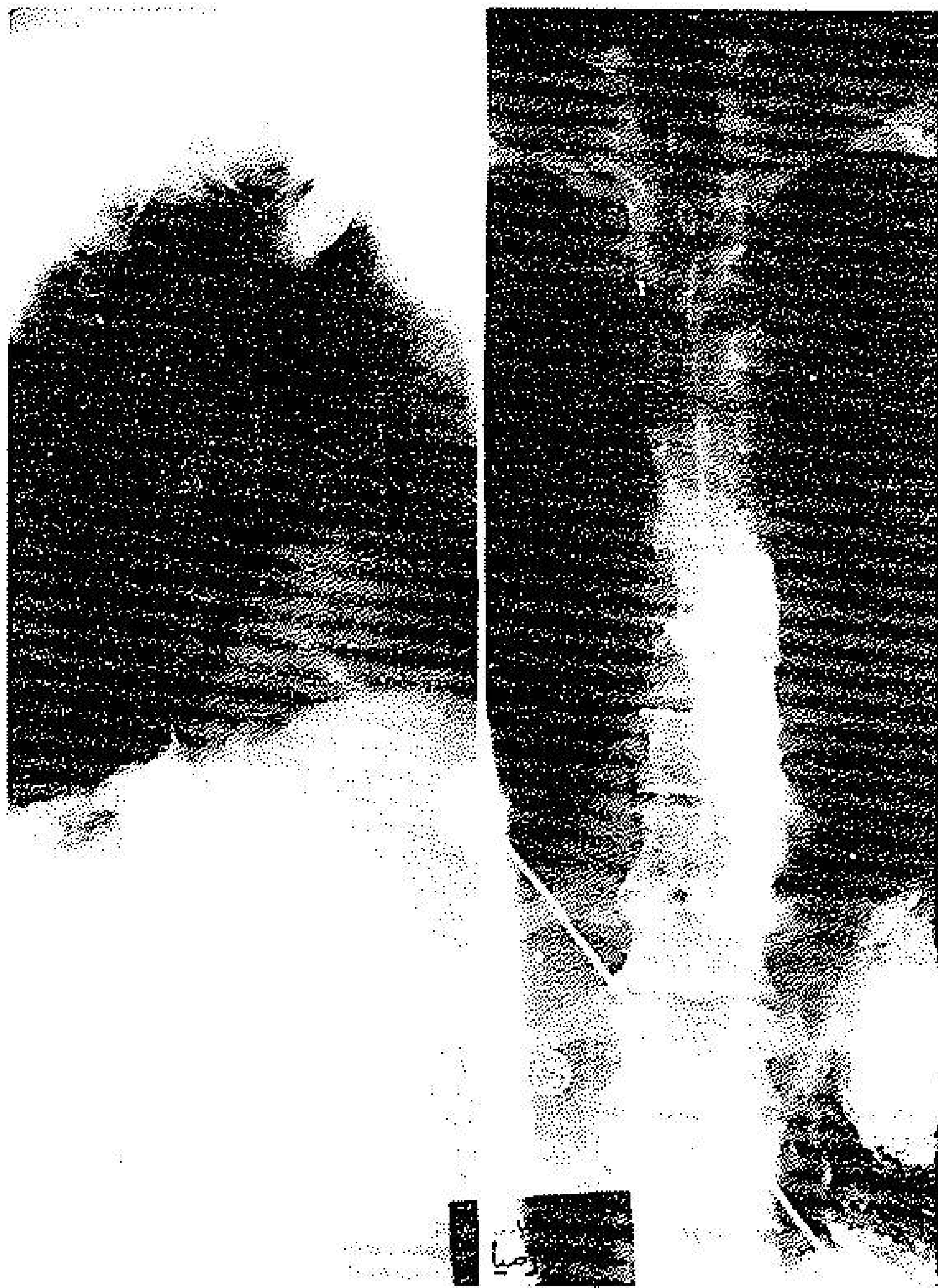

Fig 3

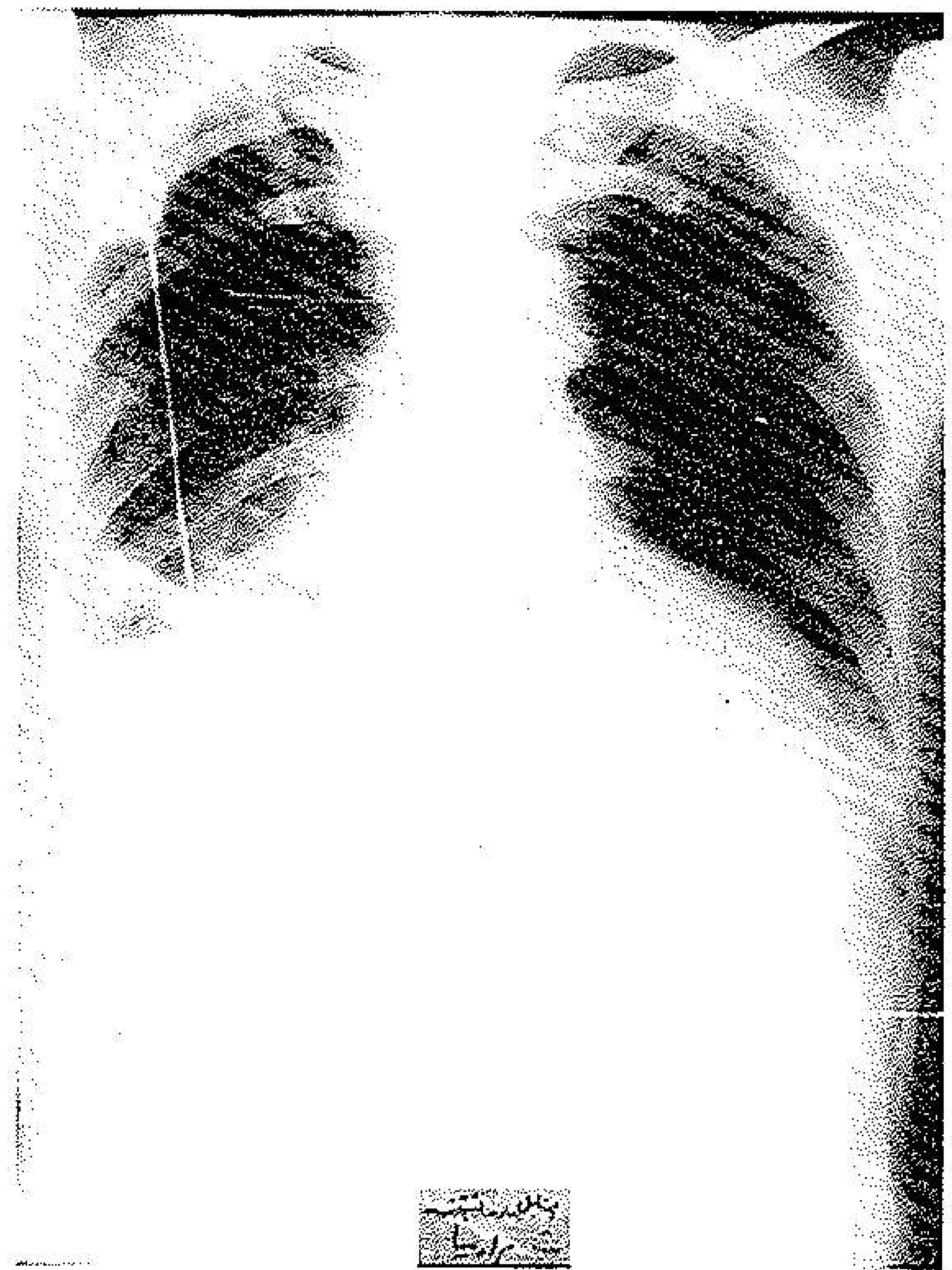

Fig 4

DISCUSSION

Spontaneous perforation of the esophagus specially middle third is not a common disease. Till 1959 only 157 cases were reported in the world literature (2) all 157 cases were in the distal third, left side of the esophagus. In 1961 a case was reported by Rose (4) rupture of middle third of the esophagus which was found at the autopsy.

There has been 3 other cases of spontaneous middle third perforation and one case of perforation of cervical esophagus reported by Mckeown (3) in 1965.

There is universal agreement upon immediate surgical repair of the ruptured esophagus. The first successful operation was performed by Barrett (1) in 1947.

In review of world literature (Derbs (2)) surgical mortality was 36 % and 100 % mortality on non-surgical methods of treatment.

It is obvious that the best result from surgical repair is obtained upon early diagnosis of the disease and repair. Mortality is very high twenty four hours after the anset. In late stage (48 hours after the anset) close thoracostomy and coverage with antibiotics is the treatment of choice.

SUMMARY

A case of Spontaneous rupture of middle third of the esophagus reported.

Literature, surgical treatment and early approach for the best result described.

References

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