The clinical, ultrasonographic and radiographic findings in three cows and one bull with pleuropneumonia are described. All the animals had fever, indigestion, tachypnoea and abnormal lung sounds. Percussion of the thoracic wall elicited signs of pain and tests for foreign bodies were positive. Ultrasonographic examination revealed an accumulation of anechogetic to hypoechogetic fluid in the pleural space in the ventral thorax of all the animals. In one animal, echogenic bands of fibrin were observed between the thoracic wall and pulmonary surface. In another, parts of the right lung were not inflated because of severe bronchopneumonia. Radiographic examination revealed a pleural effusion, apparent as a horizontal fluid line, in three animals. In addition, the increased radiopacity in parts of the dorsal lung fields and increased bronchial and peribronchial markings suggested bronchopneumonia. In three animals, the radiographs revealed linear foreign bodies in the reticulum, suggesting that the pleuropneumonia was caused by the penetration of the foreign body into the thoracic cavity. A diagnosis of pleuropneumonia was made in all the animals of the basis of the clinical, ultrasonographic and radiographic findings and the analysis of the pleural fluid. The diagnosis was confirmed at slaughter in three of them; the fourth animal was treated and was clinically healthy when it was discharged.