coagulation factor Va and provide a catalytic surface for the prothrombinase reaction. We observed that TAT and FPA were both increased in a lung cancer patient with a high level of MPs. Thus, platelet-derived MP may influence coagulation in lung cancer patients receiving chemotherapy.

Shosaku Nomura, M.D., and Kojiro Yamnaga, M.D.
First Department of Internal Medicine, Kosai Medical University, Osaka, Japan

REFERENCES

Closure of a Tracheoesophageal Fistula by Bronchoscopic Application of Tissue Glue

To the Editor:

We read with interest in the August 1991 issue of Chest the article by Antonelli et al.1 regarding the closure of a tracheoesophageal fistula by bronchoscopic application of fibrin glue.

We would like to report briefly another case of tracheoesophageal fistula closed by means of a bronchoscopic procedure. A 17-year-old boy was admitted to the ICU in October 1990 after a car accident. Flail chest, multiple bone fractures, and a brain concussion were noted. He was intubated, and mechanical ventilation was started. Twelve days later the patient underwent a tracheostomy for long-term respiratory assistance. Thirty-two days after the tracheostomy, the patient had recovered completely, and successful weaning from the ventilator permitted oral feeding instead of enteral feeding by nasogastric tube.

Immediately after the first fluid ingestion the patient experienced a severe cough, which recurred after each fluid intake. A Gastrografin swallow study showed a communication between the superior third of the esophagus and the trachea. A bronchofiberscopic attempt was made to close the fistula with tissue glue (N-butyl-2-cyanoacrylate [Histoacryl, Braun Melsungen, Germany]). The technique described by Roksvagg et al2 for closing a bronchial fistula was used. Twenty-four hours before the procedure the patient gargled with distilled water with 5 percent Betadine every 15 min. Atropine was given by intravenous instillation until the mouth was completely dry, beginning 1 h before the procedure and continuing 2 h afterward. Cardiac monitoring was performed throughout the same period. The bronchofiberscopic procedure was performed under local anesthesia. The tissue glue was applied to the fistula under direct vision; 2 ml of Histoacryl was used.

After the procedure the patient received nothing by mouth for 2 days. On the third day a second bronchofiberscopic procedure was done, which demonstrated complete visual obliteration of the fistula by the glue. A Gastrografin swallow showed no more communication between the esophagus and the trachea. Six months of follow-up showed no recurrence of the fistula.

Histoacryl was chosen because of its fast solidification (10 to 30 s) and its associated inflammatory reaction, which enhances fibrosis with formation of a foreign-body resorptive granuloma. Fistula closure is rapid with Histoacryl, and as a safety measure, 3 days was allowed for complete fistula closure before the patient resumed oral feeding. To obtain good results, the tracheal and the esophageal mucosa must be clean, noninfected, and dry; for this reason, we used Betadine for decontamination and atropine for mucosal dryness.

This is believed to be the first report of use of Histoacryl for closing a tracheoesophageal fistula, sparing the patient a major surgical procedure and providing a very good result in a few days' time. In our opinion, bronchofiberscopic closure of tracheoesophageal fistula using tissue glue has to be tried before any surgical repair since it is less aggressive and less costly.

Jihad Buschi, M.D.,
Division of Pulmonary and Intensive Care Medicine, Lebanese University School of Medicine, Beirut, Lebanon

REFERENCES

Serologic Response to Itraconazole in Allergic Bronchopulmonary Aspergillosis

To the Editor:

In the excellent report by Denning et al., which appeared in the September 1991 issue of Chest, oral itraconazole (200 mg daily for a mean of 3.9 months), used as an adjunctive therapy in six patients with allergic bronchopulmonary aspergillosis (ABPA), was effective in improving the clinical (corticosteroid requirements), serologic (total serum immunoglobulin [Ig] E level), and pulmonary functional status. However, they found no significant effect on Aspergillus-specific IgG (IgG-Af), which could be due to the fact, mentioned by the authors, that the immunodiffusion technique they used is qualitative rather than quantitative. Moreover, they state that there are no reports in the literature documenting any consistent relationship between fluctuation in an individual patient's IgG-Af level and disease activity.

We have one experience in which IgG-Af was the only serologic parameter showing improvement with oral itraconazole. The patient was a 36-year-old woman who met the diagnostic criteria for ABPA proposed by Ricetti et al. She was in the corticosteroid-dependent stage of ABPA and had had a mean of two exacerbations of asthma per year in spite of daily treatment with a mean of 20 mg of prednisone. After informed consent, a therapeutic trial of oral itraconazole, 200 mg/d for 4 months, was instituted. Along with a corticosteroid-sparing effect and an increase in spirometric values