abnormal automaticity and so may create conditions in which the slow-inward current is operative. Thus, junctional ectopic tachycardia appears to be related to abnormal automaticity that in some cases may be catecholamine sensitive, in others calcium channel-dependent.

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REFERENCES

Gorham's Disease of the Clavicle with Bilateral Pleural Effusions
Eight Years Later
To the Editor:

A case of Gorham’s disease (disappearing bone disease) of the clavicle with bilateral pleural effusions was described by us in Chest. This was the second published survivor having this bone disease with pleural effusions. New bone is now evident at the site of the excision. To the best of our knowledge, new bone formation has not been reported in previous cases of Gorham’s disease. It seems to us worthwhile to comment briefly on the outcome.

Case Report

A 26-year-old woman presented with bilateral sanguinous pleural effusions and a lytic process of the right clavicle. A diagnosis of Gorham’s disease of the clavicle was based on the histologic findings of angiomatosis of the bone and no evidence of malignancy on pleural biopsy and cytology of the pleural fluid. Talc was installed into the pleural spaces, with subsequent resolution of the effusions.

Now, eight years later, the patient is feeling well. The pleural spaces appear normal. In the region of the excised clavicle, new bone formation is seen (Fig 1), first noted about five years after the operation. The new bone is slightly deformed. Clinically, some pain is felt on moving the right arm, probably due to the bone’s instability.

DISCUSSION

This case again proves that Gorham’s disease is a benign process that, in spite of its benignity, may cause bloody pleural effusion. Local excision of the affected bone and obliteration of the pleural cavities (eg, by installing talc) seem to be appropriate measures for the resolution of the process.

New bone formation is possible, provided that enough periostium is left over. The new bone seems not to be affected again by the lytic process.

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REFERENCES

Isoenzyme Pattern of Enolase and Creatine Kinase in Small Cell Lung Cancer Patients
To the Editor:

Clinical and biologic peculiarities of small cell lung carcinoma (SCLC) have been published. Several authors have emphasized a potential interest in neuron-specific enolase (NSE), the y fraction of enolase, as a specific marker of disease evolution or treatment efficiency. Creatine kinase (CK) BB isoenzyme was also frequently detected in serum from such patients. We propose a therapeutic follow-up protocol using spectrophotometric measurement of CK and enolase activity and electrophoretic separation of isoenzymes.

Normal CK serum values are less than 130 units/L (BB isoenzyme, 0 percent) and 5 to 25 units/L for enolase (NSE fractions [xy + y] less than 10 percent).

The following observation shows the results of this study in a 60-year-old patient. The patient had a small cell lung cancer of the left upper lobe with supraclavicular lymph node involvement. He was treated with chemotherapy (adriamycin, vepeside, and cyclophosphamide). Blood samples were collected (Fig 1) before treatment (Do), after the first chemotherapy treatment (D+3), before the second treatment (D+30), and during relapse (D+150).

An increase of NSE enzyme level at D+3 was probably due to enzyme release from tumor cell necrosis under treatment. At D+30, the patient showed important clinical and radiologic improvement. He was in complete remission for several months and enzyme level (NSE and CK BB isoenzymes) returned to and remained at normal levels. Increase of enzyme levels at D+150 was the first biologic sign of relapse, and the patient developed bone metastases within weeks.

These enzyme activity measurement techniques present several

Figure 1. New bone formation in the region of the excised right clavicle.

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 advantages. They are simple, rapid and accessible to laboratories which do not have access to expensive antibodies for immunoassays.

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References


Breathing Exercises in Chest Physical Therapy

To the Editor:

I would like to respond to a review (Chest 1985; 88:436-44) by Kirillof et al entitled “Does Chest Physical Therapy Work?” I commend the authors for a review of the literature including a review of the use of chest physical therapy (CPT) in acute and chronic lung disease, and techniques. However, a major area of study was not addressed by these authors, and that is use of CPT to prevent or reverse postoperative pulmonary complications (PPC). This is an area that has perhaps been most thoroughly reviewed in the literature, beginning with the well controlled, randomly assigned study by Thoren in 1984. Thoren and subsequent investigators found a significant decrease in PPC in patients receiving CPT pre- and post-operatively, as compared to traditional postoperative stir-up regime or simply post-operative CPT. As well, Lyager found that the use of incentive spirometry did not further reduce the PPC in patients who were receiving a well organized program of CPT.

Thoren, Vraciu and Lyager employed CPT with an emphasis on maximal inspiratory volume through breathing exercises in conjunction with position change and use of manual techniques, as necessary. Therapist intervention occurred once or twice a day, with the patient instructed in breathing techniques to be performed between treatments, and nursing staff provided additional support between CPT treatments. This type of treatment is in contrast to studies by such authors as Craven and Reine where CPT is described as position change and routine use of the manual techniques with either no apparent emphasis on voluntary maximal inspiration or assessment regarding secretion retention in relation to the need or frequency of the manual techniques.

I would also like to address the use of CPT on patients with status asthmaticus. The authors refer to the Rochester and Goldberg paper on physical therapy presented at the Atlanta In-Hospital Respiratory Therapy Conference, noting that no objective evidence is available regarding the use of CPT with status asthmaticus patients. In our clinical experience, we have employed CPT on patients with status asthmaticus, with dramatic results that include mobilization of large amounts of secretions (30 to 40 ml per treatment); significant drops in peak inspiratory pressures required to ventilate the patient; and dramatic radiographic changes. This area certainly warrants further study.

The efficacy of chest PT is frequently difficult to evaluate due to numerous factors including and probably primarily due to the lack of adequate definition of treatment protocol, as well as the lack of available information regarding optimal frequency, duration and intensity of manual techniques. Reviews such as those provided by Kirillof allow the clinician to re-evaluate the spectrum of care that falls under the title “chest physical therapy,” as well as documented efficacy.

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Communications to the Editor