ADDENDUM

The conclusion after analyzing the paint specimen and the control paint is: (A) the paint specimen used in the dental tools has a higher plasticizer than the control paint (DuPont® Lucite); (B) from the toxicity studies on the plasticizer1,2 we assume the chronic condition caused in this patient may be due to plasticizer and not PVC or monovinylchloride; (C) we have to emphasize "there is a gross difference between composition of the plasticizer of the paint used in the dental equipment and the paint used as the control."

*Sample of dental equipment paint obtained from Case Western Reserve University Dental School.

REFERENCES

2 Chen WS. Bis(2-ethylhexyl) phthalate levels in dogs, and in uremic and non-uremic patients. Cleveland: Cleveland State University Press, 1979

Improperly Assembled Expiratory Flow Tube/Sensor

To the Editor:

The incident reported by Dr. S. Carson and Mr. P. Ho'n in the March, 1981 issue of Chest is a fairly common problem. I would like to share this additional information with your readers, if I may.

When the expiratory flow tube/sensor is improperly assembled and connected to the Bourns Bear respirator it causes a total obstruction of the tidal volume that is to be delivered to the patient and this results in the following: 1) the pressure alarm should activate since peak pressure is reached due to this obstruction; 2) the low volume alarm should activate since there is no flow through the flow sensor. This also causes volume read out to read zero.

These are fairly common occurrences with any respirator and are indicative of physiologic obstruction such as the patient trying to cough or "fighting" the machine. If no obvious effort is noted on the patient's part, the attention should be diverted and focused on the mechanical aspect.

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To the Editor:

Mr. Dani's comments regarding the incident which occurred in our ICU and his assertion that similar accidents occur frequently in other ICUs are both appreciated.

Although we agree with Mr. Dani that expiratory ventilator flow obstruction will produce a zero exhale volume read-out and will activate the low exhal volume and pressure limit alarms, we disagree with his contention that mechanical malfunction can be suspected by the absence of respiratory effort on the part of the patient. As described in our report, the patient was extremely agitated during the period of ventilator malfunction and was making active (but ineffectual) respiratory efforts until she lost consciousness.

We wish to emphasize that the purpose of our letter was to alert readers to one of the many potentially fatal hazards which exist in ICUs which can be prevented. If the equipment modifications which we described are utilized, accidental misassembly of the Bourns Bear I external flow transducer producing an expiratory obstruction can be totally prevented in the future.

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Evulsion Biopsy of Pleura Concomitant with Insertion of Closed Thoracostomy Tube

To the Editor:

Needle biopsy of the pleura at the time of thoracocentesis is an acceptable procedure for pleuropneumonic diseases causing pleura effusion. In addition to the risk of causing pneumothorax, the concave configuration of the pleural cavity does not lend itself to a satisfactory pleural biopsy in many cases. Since most massive, as well as intractable pleural effusions do require a closed thoracostomy chest tube, it is logical to obtain an adequate piece of parietal pleura for histologic and bacteriologic studies at the time of tube insertion.

I have utilized the concomitant evulsion biopsy of pleura at the time of closed thoracostomy tube for the past year and find this combination to be safe and productive.

TECHNIQUE

1. With the patient lying on the normal side, the lateral chest wall is prepped and draped. Appropriate level of insertion of chest tube is selected and a small skin incision is made under local anesthesia.
2. An oblique track is made by gentle dissection with a curved hemostat from the skin incision leading to the pleural cavity.
3. Once the pleural cavity is entered, the hemostats are rotated in such a way that the tip of the hemostat comes in contact with the parietal pleura of the chest wall.
4. The hemostat is open and the pleura is grasped.
5. With a quick withdrawing motion, a piece of pleura is evulsed. The biopsy specimen is submitted for appropriate studies.
6. Through the same track the chest tube is inserted and anchored to the skin with appropriate nonabsorbable suture material.

Multiple biopsies of the pleura can be done with this technique. The size of the biopsy specimen is considerably larger than can be retrieved with pleural biopsy needle. The procedure does not add any discomfort, and to date, no untoward complication has been encountered in 15 cases.

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