



FIG. 1. Hyperpigmented circular area over the left shoulder.

Although the centers of these circles show some hyperpigmentation, it is the area corresponding to the outer adhesive portion of the pads that is most affected (fig. 1).

Given that we routinely use five-lead electrocardiogram monitoring in our operating room and that two leads are usually removed for recovery room monitoring in healthy patients, I hypothesize that the duration of exposure to the electrocardiogram pads might have played a role in this skin reaction. Only three areas of hyperpigmentation were noted, and they corresponded to the electrocardiogram leads used in the postanesthesia recovery room.

The normal skin barrier can be greatly reduced by damaging the horny layer by adhesive tape stripping, and this could have been a contributing factor in the absorption of a triggering agent.¹ On the

other hand, allergic reactions that trigger skin hyperpigmentation have a more gradual onset.² Skin hyperpigmentation has been reported in patients receiving thiopeta (a chemotherapeutic agent) underneath skin occluded by electrocardiogram pads in circumstances unrelated to anesthesia and surgery.³

Our patient was seen by a dermatologist at our institution. He believed that her skin type made her prone to postinflammatory hyperpigmentation because there were other hyperpigmented areas corresponding to sites of previous minor skin injuries. Although she was prescribed a topical treatment consisting of a combination of tretinoin, hydrocortisone, and hydroquinone, she never followed the recommendations, and the lesions have not faded.

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REFERENCES

1. Stutgen G, Bauer E: Penetration and permeation into human skin of fusidic acid in different galenical formulation. *Arzneimittel Forschung* 38:730-735, 1988
2. Imokawa G, Kawai M: Differential hypermelanosis induced by allergic contact dermatitis. *J Invest Dermatol* 89:540-546, 1987
3. Horn TD, Beveridge RA, Egorin MJ, Abeloff MD, Hood AF: Observations and proposed mechanism of N'N'N'-triethylene-thiophosphoramidate (Thiopeta)-induced hyperpigmentation. *Arch Dermatol* 125:524-527, 1989

(Accepted for publication March 8, 1992.)

Anesthesiology
76:1064, 1992

Accelerography in Neuromuscular Monitoring

To the Editor:—I read with interest the article "Accelerographic Train-of-four at Near-threshold Currents."¹ The article cited Jensen *et al.* (ref. 3), who presented Accelerograph® as a registered trademark for a new accelerometric neuromuscular transmission monitor.² The correct common noun of the machine, however, should be "accelerograph," not "accelograph." "Acceleration" comes from *ad* + *celerare*, both Latin. *Celer* means swift; *celerare* means to hasten. Seismologists also use accelerographs.

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76:1064-1065, 1992

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REFERENCES

1. Silverman DG, Connelly NR, O'Connor TZ, Garcia R, Brull SJ: Accelerographic train-of-four at near-threshold currents. *ANESTHESIOLOGY* 76:34-38, 1992
2. Jensen E, Viby-Mogensen J, Bang U: The accelerograph®: A new neuromuscular transmission monitor. *Acta Anaesthesiol Scand* 32:49-52, 1988

(Accepted for publication March 8, 1992.)

Torsion of a Double-lumen Tube in the Left Bronchus

To the Editor:—Incorrect positioning of a double-lumen tube (DLT) occasionally occurs and may be undetected when the position of the DLT is checked only by clinical signs.¹ Therefore, fiberoptic bronchoscopy is recommended to confirm the proper position of the DLT.²

I report a case of improper placement of the DLT that occurred despite a routine examination of the tube's position with a fiberoptic bronchoscope.

A 48-yr-old woman, height 160 cm, weight 56 kg, was scheduled