

Figure 1a
Group A (control)

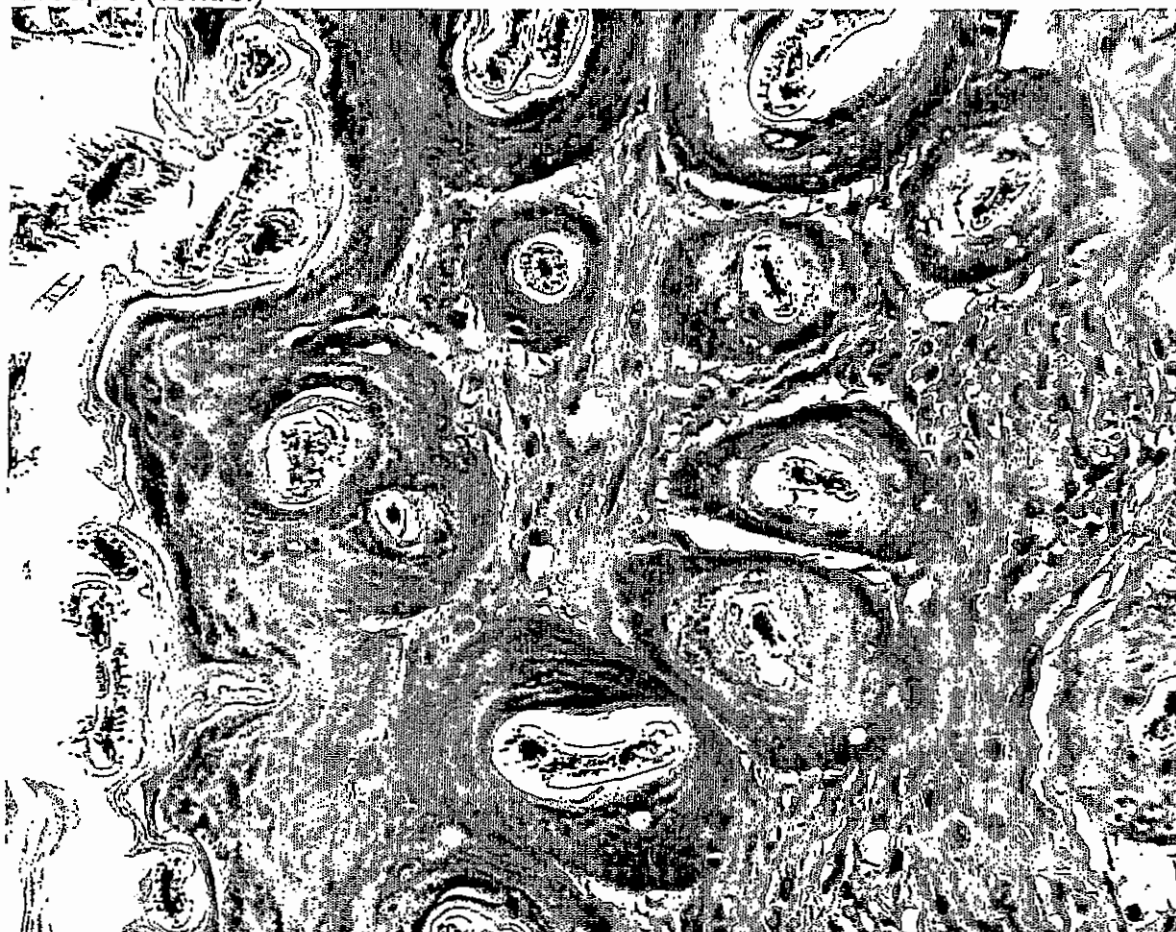


Figure 1b
Group B

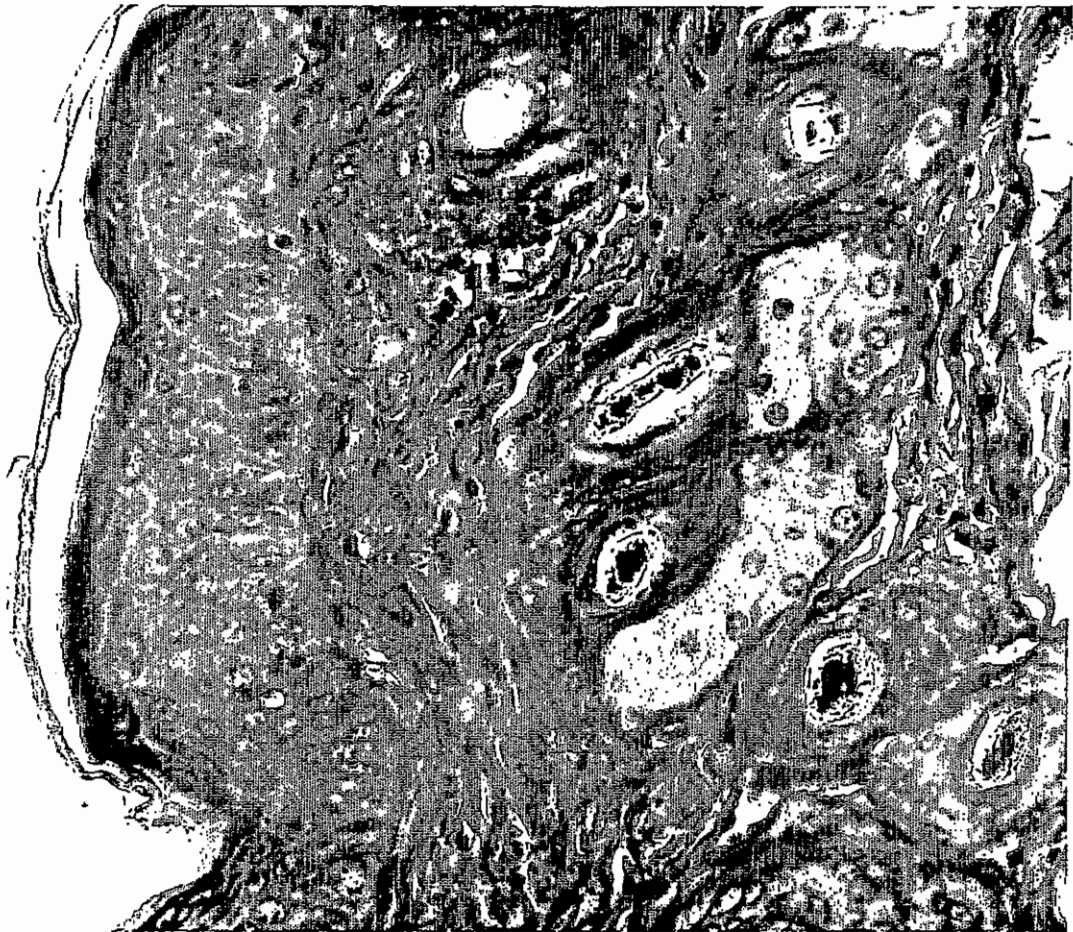


Figure 1c
Group C

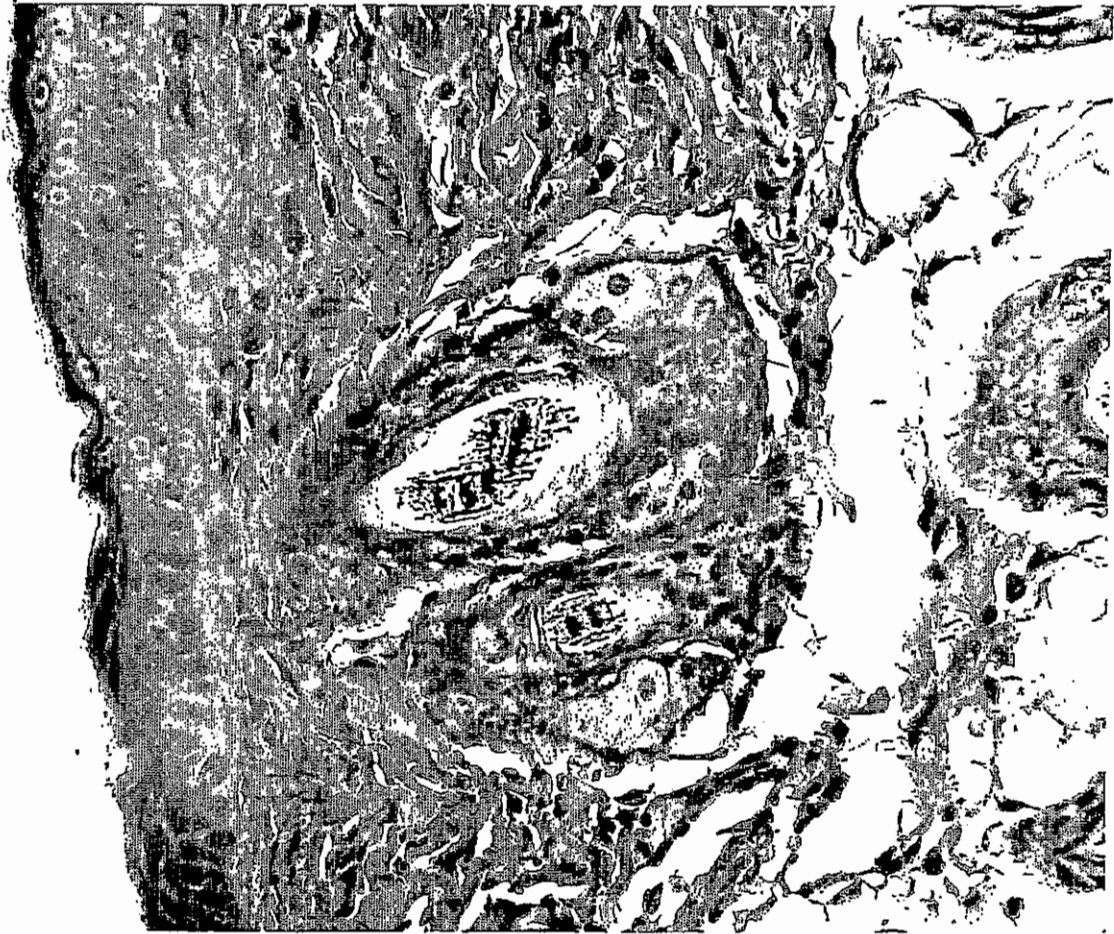


Figure 1d
Group D

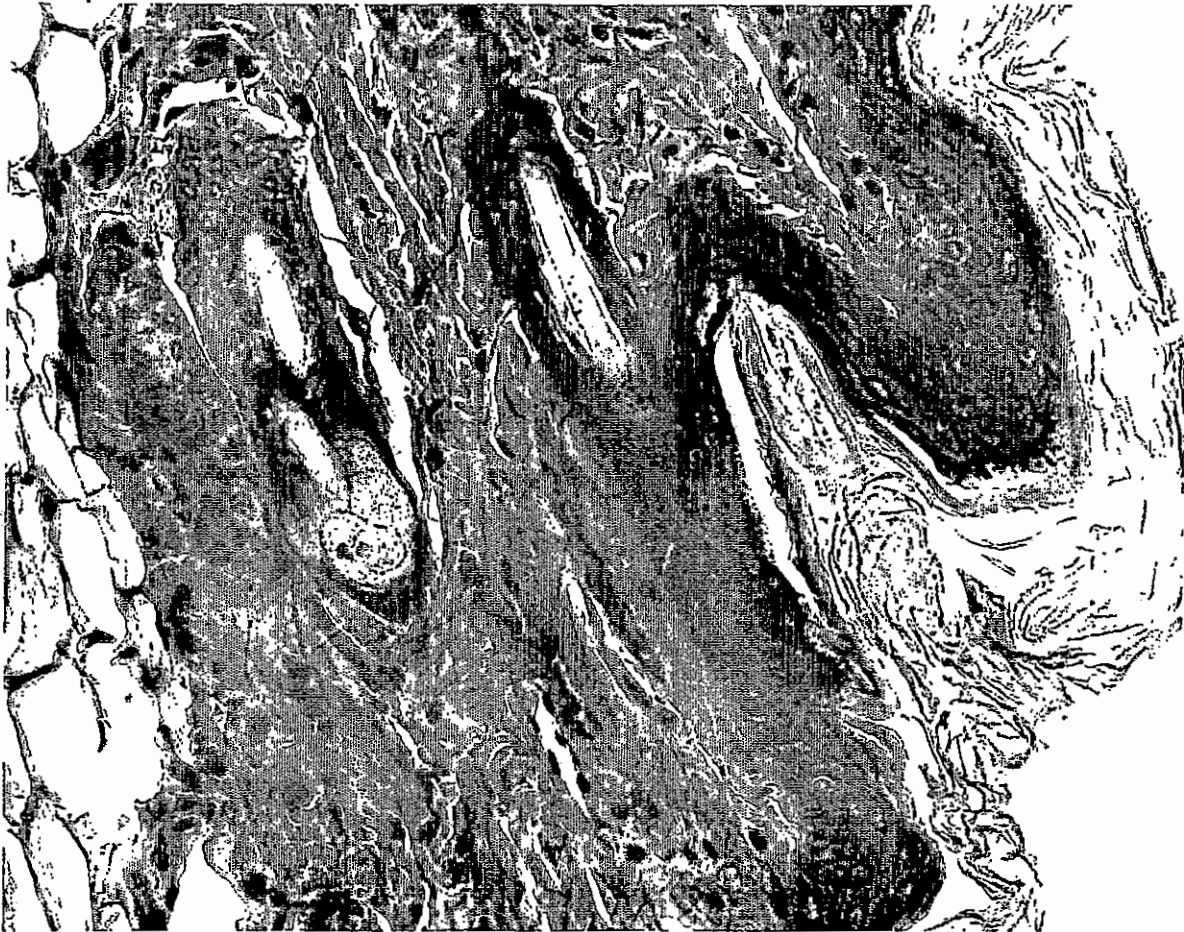


Figure 1. Representative photomicrographs of murine skin sectioned and stained with Verhoeff Elastica stain after 21 days topical treatment with a) Base only ("blank"), b) 10 μM Zn^{++} ("Z low"), c) 1.0 mM Zn^{++} ("Z med"), or d) 100mM Zn^{++} ("Z high") depicting increasing elastin levels.

As dose of Zn increases from zero (A) to low (B) to medium (C) to high (D) the length, density and thickness of black elastic fibers increases significantly. At high dose, epidermal sloughing and irritation occurs, however. Lower doses afford the benefits without local signs of irritation. Overall, ionic zinc affords dose-dependant increases in elastin content of skin after topical administration.



(A)



(B)

FIG. 2

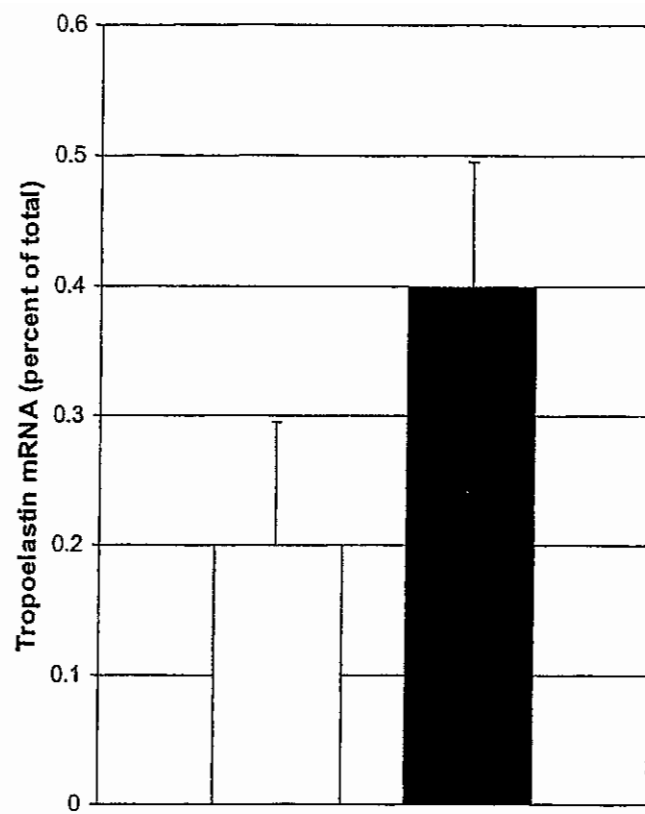


FIG. 3

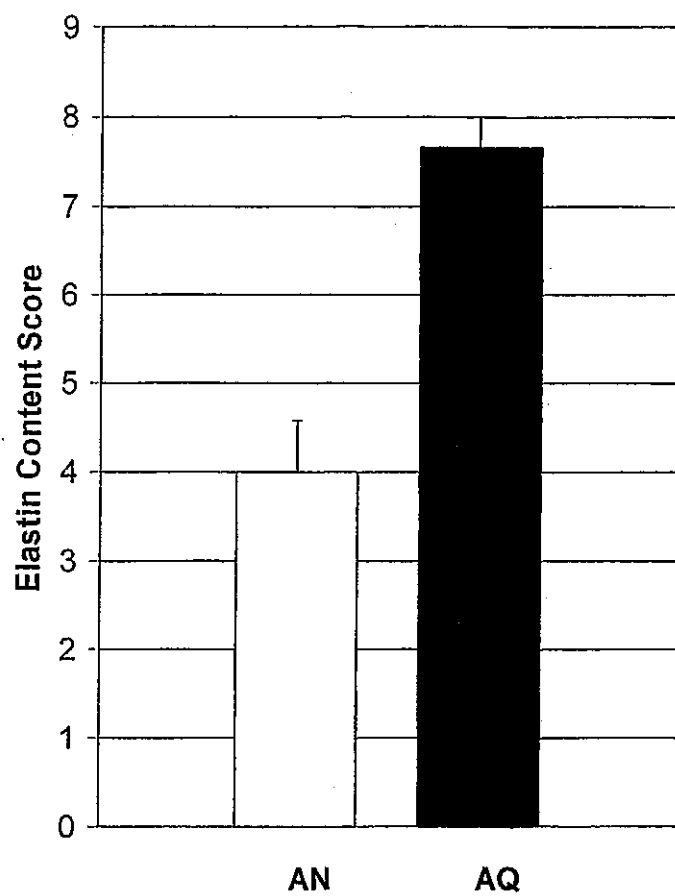


Fig. 4 (AN - control; AQ - containing zinc)

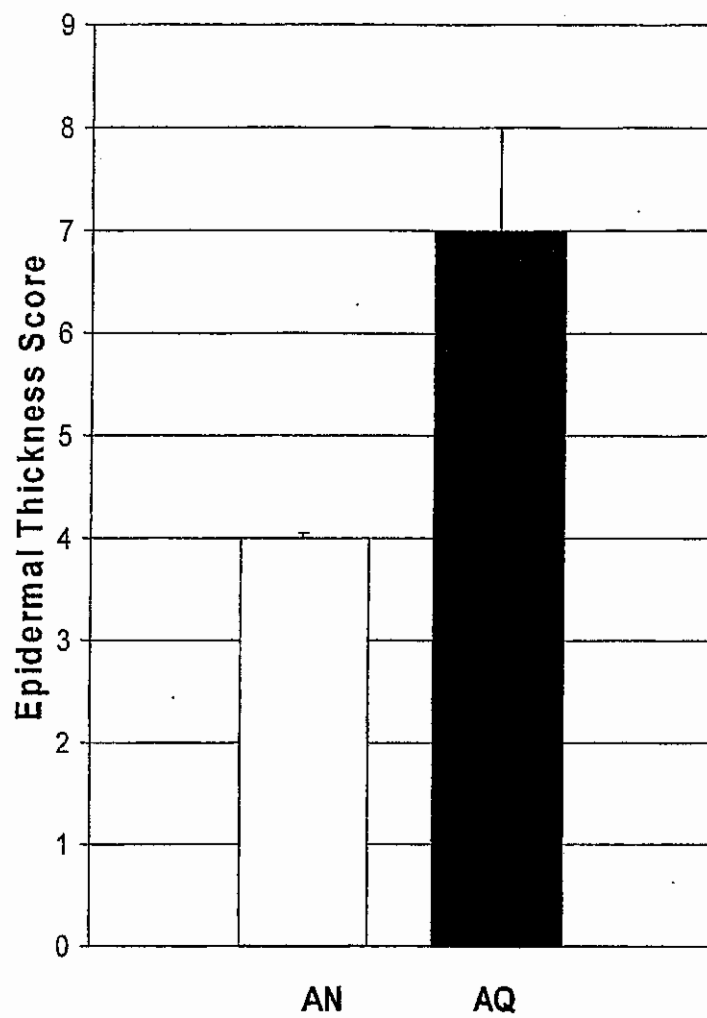


FIG. 5 (AN - control; AQ- containing zinc)

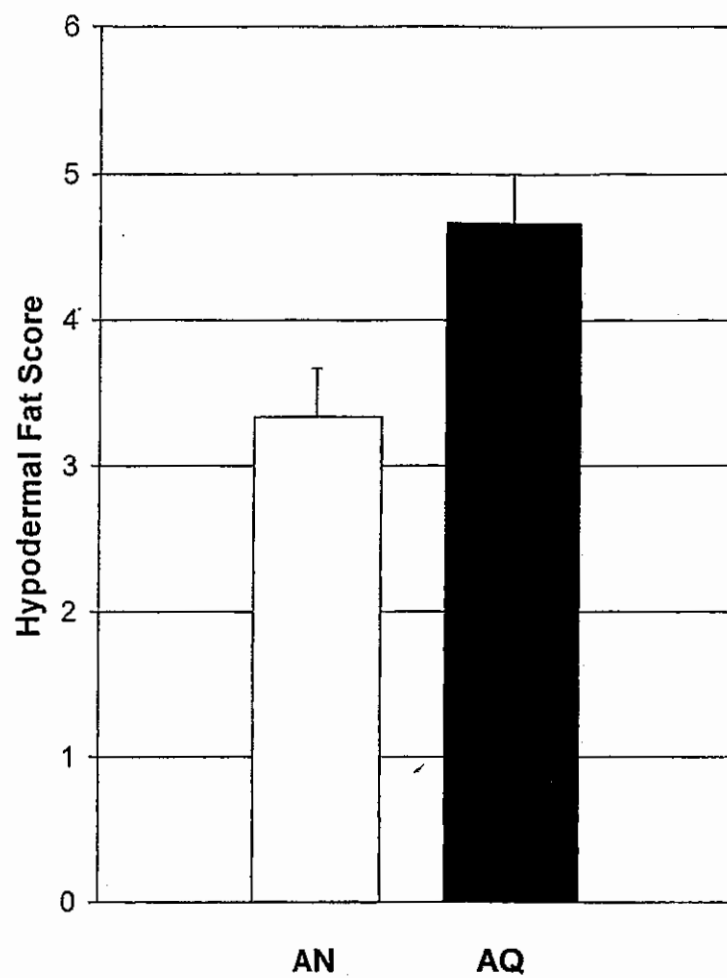


FIG. 6 (AN - control; AQ - containing zinc)

FIG. 7: subject 1 (left image - 0 time; right image - 4 weeks)

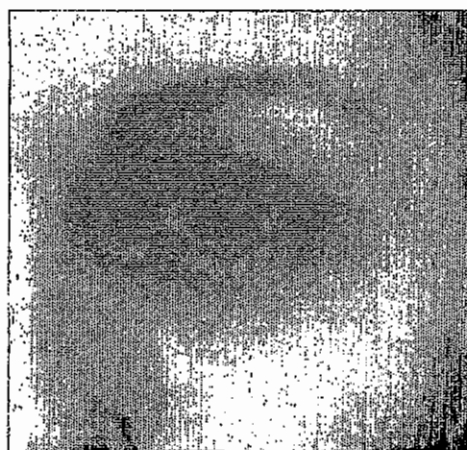
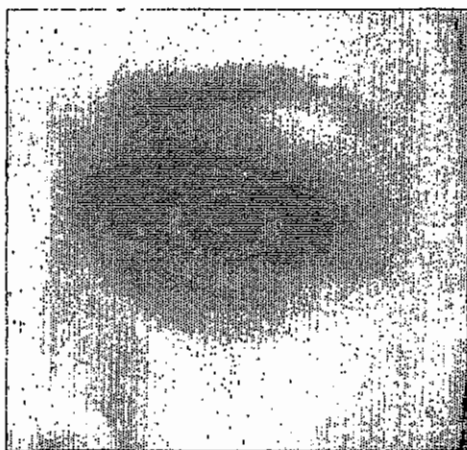
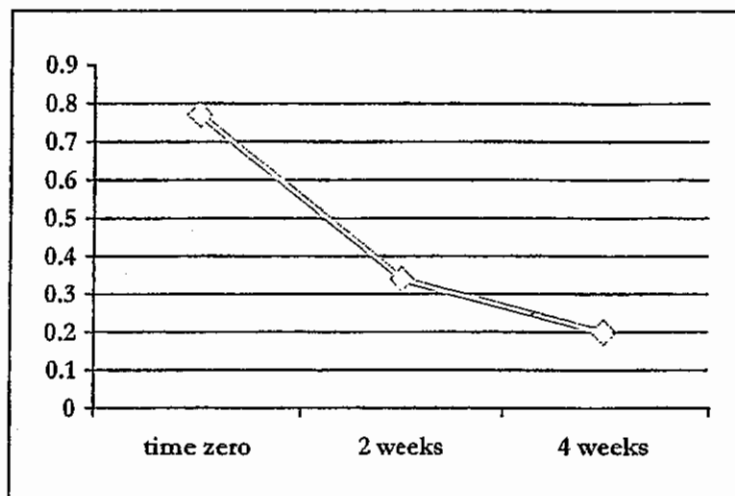
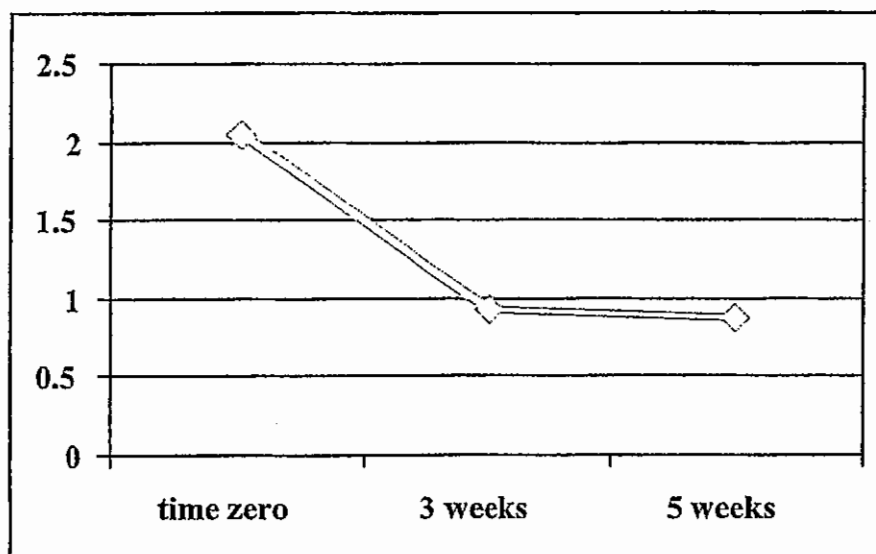


FIG. 8: Subject 2 (left image - time 0; right image - 5 weeks)



Time Zero



Time 5 Weeks

FIG. 9: Subject 3 (left image - time 0; right image - 6 weeks)

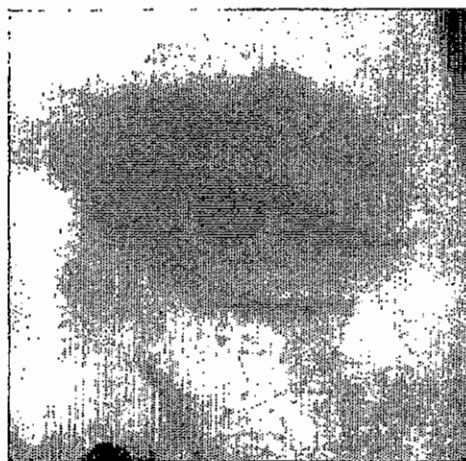
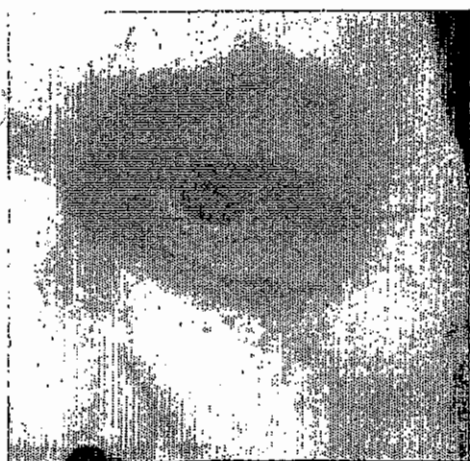
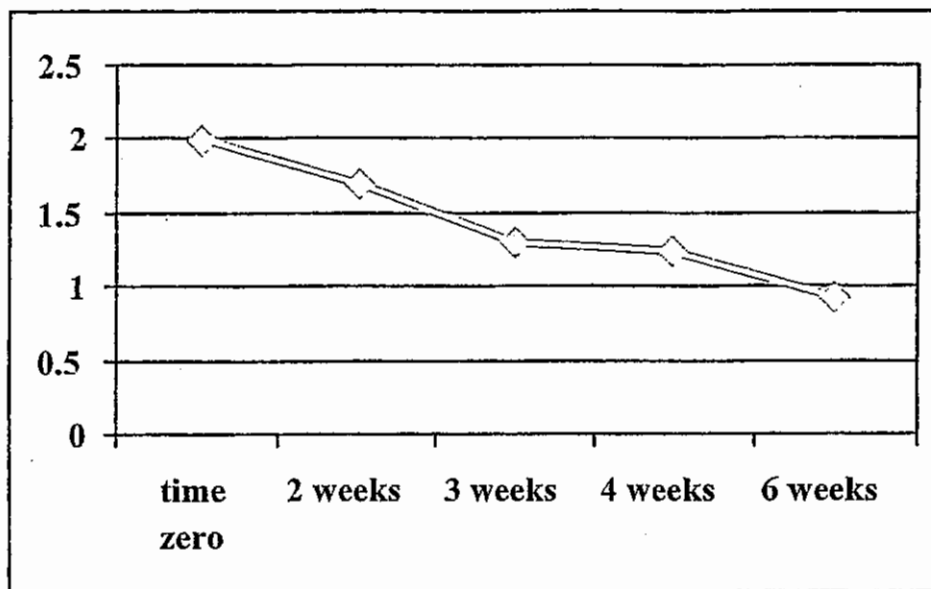


FIG. 10: Subject 4 (left image - time 0; right image - 2 weeks)

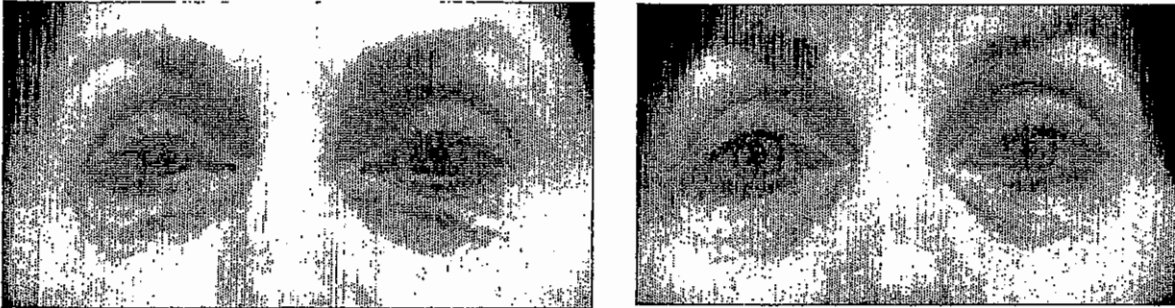
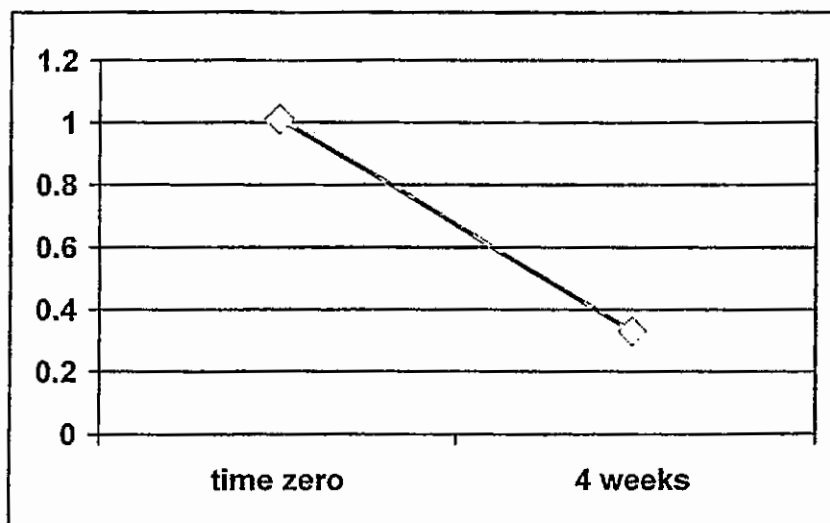


FIG. 11: Subject 5 (left image - time 0; right image - 4 weeks)



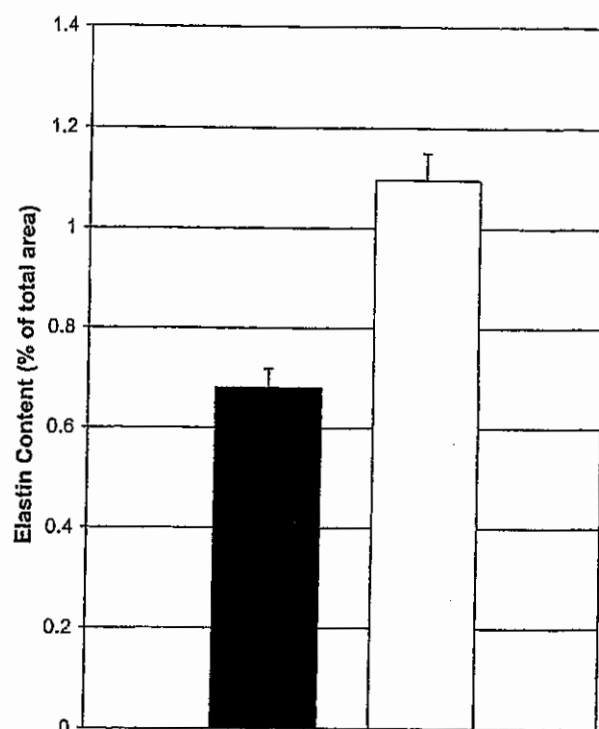


FIG. 12

Zinc acetate- mediated inhibition of elastase

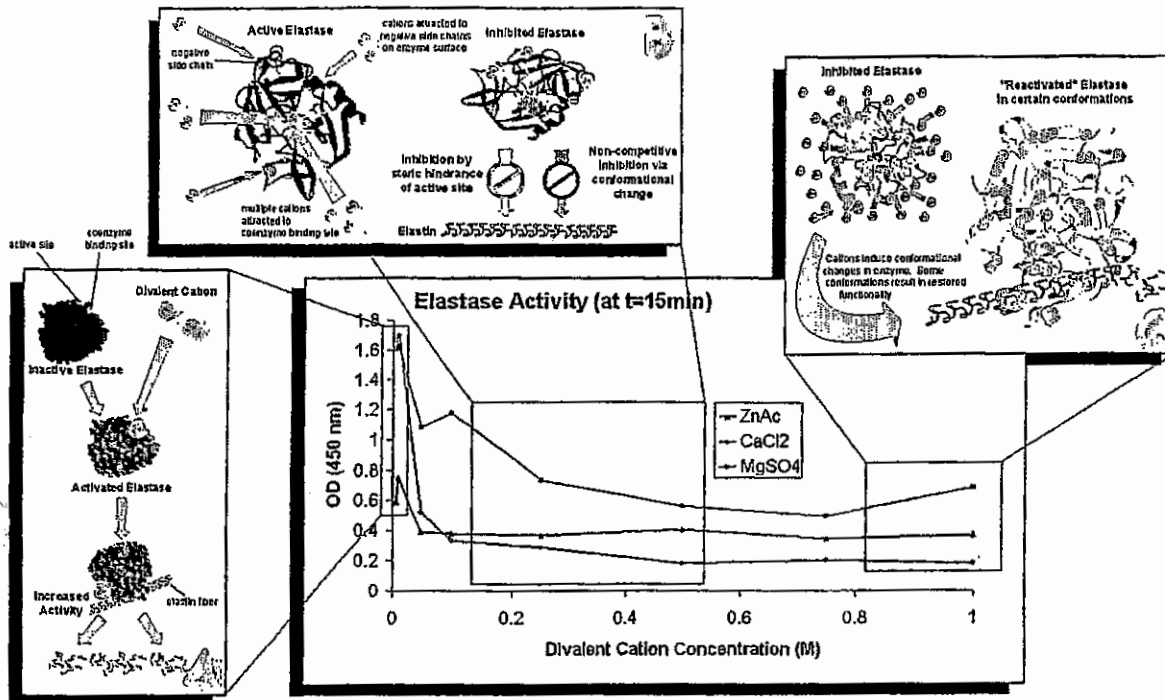


FIG. 13