

Letter to the Editor

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Since acceptance of our paper, "Serum Glutathione Reductase and Cystic Fibrosis" (1), we have obtained additional data which support the specificity of the reported serum glutathione reductase (GR) changes in cystic fibrosis (CF). Serum was obtained from 10 additional CF individuals and 10 sex- and approximately age-matched controls. Serum from each individual was assayed for GR, lactate dehydrogenase (LDH), and glutamic-pyruvic transaminase (GPT). Raised serum levels of the latter two enzymes reflect tissue damage. As in previous series, mean GR in CF was 20% greater than in controls ($P < 0.005$). No difference was found between CF and controls for either LDH or GPT ($P > 0.40$). The following correlation coefficients were estimated: (controls: GR-LDH (0.86); GR-GPT (0.55)); (CF: GR-LDH (-0.06); GR-GPT (-0.15)). It appears that some underlying process or processes such as leakage into serum from cellular damage as reflected in raised LDH and GPT might lead to raised GR as demonstrated

by positive correlations in controls. For example, in one non-CF control subject in whom LDH and GPT values were abnormally high, GR was greater than the CF mean.

In no CF subject was serum LDH abnormally raised. In two CF subjects in whom GPT values exceeded normal values, GR was no different from the CF mean GR. The absence of a positive correlation between these enzymes and GR in the CF sample as well as normal values for LDH and GPT in CF suggests that the raised serum GR in CF is not attributable to tissue leakage from damaged cells secondary to the disease.

REFERENCES AND NOTES

1. Shapiro, B. L., Smith, Q. T., and Warwick, W. J.: Serum glutathione reductase and cystic fibrosis. *Pediat. Res.*, 9: 885 (1975).
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