

explained by the hypothesis that steroid increases the permeability (Rowland, 1976) of the defective plasma membrane of the muscle fibres of DMD cases (Mokri and Engel, 1975), resulting in additional release of CPK to blood. Similar but less appreciable CPK release phenomena may occur in other MD cases. The CPK clearance factor probably remains constant in these cases. A possible explanation of the rise in CPK in some carriers was proposed by Hughes *et al.* (1971) that there are two populations of carriers—normal and abnormal. The abnormal carriers might respond to steroid in a similar way provided they had similar plasma membrane defects to DMD cases. Other cases of neuromuscular disorders and normal controls probably have no such plasma membrane defect.

The results indicate that steroid-induced CPK estimation can differentiate MD from other muscle diseases. The test may also help to increase the rate of detection of Duchenne carriers in those cases with 'borderline' basal CPK activity and negative electromyographic and muscle biopsy findings.

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#### References

- Hughes, R. C., Park, D. C., Parsons, M. E., and O'Brien, M. D. (1971). Serum creatine kinase studies in the detection of carriers of Duchenne dystrophy. *Journal of Neurology, Neurosurgery and Psychiatry*, **34**, 527–530.
- Mokri, B., and Engel, A. G. (1975). Duchenne dystrophy: electron microscopic findings pointing to a basic or early abnormality in the plasma membrane of the muscle fibre. *Neurology*, **25**, 1111–1120.
- Rowland, L. P. (1976). Pathogenesis of muscular dystrophies. *Archives of Neurology*, **33**, 315–321.
- Takahashi, K., Oimomi, B. M., Shinko, T. G., Shutta, K., Matsuo, B., Takai, T., and Imura, H. (1975). Response of serum creatine phosphokinase to steroid hormone. *Archives of Neurology*, **32**, 89–91.

## Comparison between microscopical examination of unstained deposits of urine and quantitative culture

Sir,

The conclusions reached by Littlewood and his colleagues in their article comparing microscopical examination of unstained deposits of urine and quantitative culture (*Archives*, 1977, **52**, 894) are not supported by the data presented. Urine was collected in four different ways, as suprapubic, midstream, clean catch, and bag specimens from children aged 2 weeks to 14 years. A surface bacterial count  $\geq 10^5$  was taken as indicating infection in all urines however collected and regardless of the child's age. However, this criterion of infection is not applicable to urine collected by bladder puncture in which *any* growth indicates infection (Newman *et al.*, 1967; McFayden and Eykyn, 1968; Paterson *et al.*, 1970; Rubin, 1975) nor to bag urines from neonates which often have a surface viable count  $\geq 10^5$ , but are sterile when a suprapubic specimen is obtained (Edelmann *et al.*, 1973).

By not using these generally accepted criteria of infection and noninfection in suprapubic and bag specimens of urine, the authors will have underdiagnosed infection in some cases of the former, and overdiagnosed infection in some cases of the latter. This vitiates completely the correlation found between urinary infection and the number of bacteria seen on microscopy.

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Dr Littlewood comments:

Our study amounted to a simple comparison between the numbers of organisms visualised in the urine deposit and the quantitative culture, irrespective of the method of collection. Our data confirm that the culture result can usually be predicted from the number of organisms visualised on microscopy. It is unfortunate that we referred to urines growing  $>10^5$  organisms per ml as 'infected'. There was no implication that the *patients* had a urinary tract infection. We are well aware that any growth from a suprapubic urine is meaningful and bag urines even from healthy infants contain many bacteria (Littlewood, 1971). Whether or not the patients had bacteria within the urinary tract is not the point of the study. Those experienced in the art of urinary microscopy will realise the great benefits that accrue to all if this simple, cheap, interesting, and informative technique is used in the clinic.

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#### References

- Edelmann, C. M., Jr., Ogwo, J. E., Fine, B. P., and Martinez, A. B. (1973). The prevalence of bacteriuria in full term and premature infants. *Journal of Pediatrics*, **82**, 125–132.
- Littlewood, J. M. (1971). White cells and bacteria in voided urines of healthy newborns. *Archives of Disease in Childhood*, **46**, 167–172.
- McFayden, I. R., and Eykyn, S. J. (1968). Suprapubic aspiration of urine in pregnancy. *Lancet*, **1**, 1112–1114.
- Newman, C. G., O'Neil, P., and Parker, A. (1967). Pyuria in infancy, and the role of suprapubic aspiration of urine in diagnosis of infection of the urinary tract. *British Medical Journal*, **2**, 277–279.
- Paterson, L., Millar, A., and Henderson, A. (1970). Suprapubic aspiration of urine in diagnosis of urinary tract infections during pregnancy. *Lancet*, **1**, 1194–1196.
- Rubin, M. I. (1975). Infection of the urinary tract. *Pediatric Nephrology*, p. 607. Ed. by M. I. Rubin and T. M. Barratt. Williams and Wilkins, Baltimore.

## Discharge of small babies from hospital

Sir,

Early discharge of very small babies from neonatal units could be valuable in reducing mother-child separation. Nursery occupancy figures could be reduced, making it possible for a limited number of nurses to care more