glomerulonephritis, three focal segmental glomerulosclerosis, one diffuse proliferative glomerulonephritis, and one membranoproliferative glomerulonephritis. All of the five patients with membranous glomerulonephritis were hepatitis B surface antigen positive and all were boys aged 5 to 9 years (mean 7.8). None responded to steroids but their natural history has been one of slow recovery. Three patients remitted spontaneously after an interval of one to three years, while the remaining two had persistent, mild, asymptomatic proteinuria. Renal function did not show any deterioration over a follow up period of one to five years in all patients.

Our prevalence rate of 12% for membranous glomerulonephritis in children with nephrotic syndrome is quite high compared with that found by the International Study of Kidney Disease in Children in developed countries, but is comparable with areas where the incidence of hepatitis B surface antigen carrier status is high. Hepatitis B is endemic in Hong Kong and the prevalence of surface antigen positivity is 6-7% in the first decade of life. The association between childhood membranous glomerulonephritis and hepatitis B infection is very strong and all our patients with this were hepatitis B surface antigen positive. The mode of hepatitis B infection in these children is unknown. Vertical transmission is presumed to be the main infective mode responsible for childhood membranous glomerulonephritis in Japan, while horizontal transmission is thought to be more important in Taiwan. None of our patients had a previous history of hepatitis and the interval between the time of infection and the onset of symptoms of membranous glomerulonephritis cannot be determined. Interpretation of the results of hepatitis B marker screening of the family members at the time of, or after the diagnosis would be difficult. A long term, longitudinal follow up study of infected subjects is required to elucidate this. We are presently undertaking such a study to look for the causal and time relation between hepatitis B infection and the development of membranous glomerulonephritis in children.

References

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Electrically heated gloves in children with Raynaud’s phenomenon

Sir,

Raynaud’s phenomenon may occur in up to 10% of the general population but it is very rare in childhood. Many treatments have been tried with little long term benefit, including a wide range of drugs, cervical sympathectomy, plasmapheresis, and behavioural therapy. More recently the use of electrically heated gloves was described in adult patients. We report the successful use of these gloves in two children (Table).

The acrylic gloves have an interknitted electrical heating element on the inner surface. Outwardly they look like ordinary knitted gloves and may be washed. They are heated from a battery pack worn on a waist belt and

<table>
<thead>
<tr>
<th>Case no</th>
<th>Sex</th>
<th>Age (yrs)</th>
<th>Diagnosis</th>
<th>Duration of Raynaud’s phenomenon before glove trial</th>
<th>Ordinary lined gloves</th>
<th>Electrically heated gloves</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>F</td>
<td>9</td>
<td>Primary Raynaud’s phenomenon</td>
<td>1 yr</td>
<td>Ineffective</td>
<td>Effective</td>
</tr>
<tr>
<td>2</td>
<td>M</td>
<td>13</td>
<td>Raynaud’s phenomenon in association with scleroderma</td>
<td>4 yrs</td>
<td>Ineffective</td>
<td>Effective</td>
</tr>
</tbody>
</table>

Figure Electrically heated gloves.
connected to the gloves by flexible leads which can be concealed beneath coat sleeves (see Figure). A battery charger is also provided so the battery pack may be recharged overnight. They are available from Medmek (PO Box 18, Romsey, Hampshire, SO5 9ZY) and may be prescribed for children on an NHS appliance form by a consultant. Electrically heated socks are also available and were used with benefit in case 2.

Parents of both children thought that definite, symptomatic improvement had been achieved. After four months' use (case 1) and 9 months' use (case 2) no difficulties or complications had been encountered. The wrist belt and battery were thought to be a little heavy by both children but this had not deterred them from using the gloves.

In the absence of any effective treatment at present for severe Raynaud's phenomenon it would seem that heated gloves have some value and may be used in children.

References


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The 'bright thalamus'

Sir,

I read with interest the paper by Skeffington and Pearse.1 They showed a new neonatal cerebral ultrasound appearance of high amplitude echoes that arise diffusely throughout the brain. We report an additional finding—the 'bright thalamus'.

In normal brain sonography the thalamus appears as areas of medium level echo density,2-4 A term, Chinese baby who suffered perinatal asphyxia lasting about 15 minutes and neonatal seizure was scanned at age 17 days with the Aloka SSD-720 sector scanner. Bilateral high amplitude echoes were noted in the thalamus (Fig. 1). Follow up brain ultrasound scan at 3 months of age showed dilatation of lateral ventricles and unchanged, hyperdense thalamus (Fig. 2). The baby has clinical evidence of microcephaly and generalised hypotonia.

References


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Fig. 1 Brain ultrasound scan at age 17 days showing hyperdense thalamus bilaterally.

Fig. 2 Brain ultrasound scan at age 3 months.