

spectral emission lies between 300–600 nm for the blue lamp, with the implication that it is this spectral interval which is required for effective phototherapy is misleading. The spectral emissions of the Sylvania F20T12G (green) and F20T12B (blue) lamps used by these authors are compared here with the spectral emission of another lamp which is also frequently available in hospitals, an ultraviolet lamp used for the phototherapy of psoriasis (figure). A potential source of confusion is that nearly all ultraviolet fluorescent lamps emit a pale blue light not dissimilar from the blue fluorescent lamps used for neonatal phototherapy. The statement that the spectral emission lies between 300 to 600 nm could equally be made for each of the lamps. Yet if neonates were exposed to the radiation from an ultraviolet fluorescent lamp for the same time that they are normally exposed to 'blue light' the resulting erythema would be severe and possibly fatal.

Although it could be argued from the figure that the spectral emission of the blue light does lie between 300–600 nm, a statement like this is meaningless unless it is qualified by reference to the biological action of the radiation, as all photobiological phenomena, such as erythema, bilirubin dissociation, or photosynthesis show a strong, but different, dependence on the wavelength of the radiation.

References

- ¹ Ayyash H, Hadjigeorgiou E, Sofatzis I, Dellagrammaticas H, Sideris E. Green or blue light phototherapy for neonates with hyperbilirubinaemia. *Arch Dis Child* 1987;62:843–5.
- ² Longworth JW. On light, colors, and the origins of spectroscopy. In: Regan JD, Parrish JA, eds. *The science of photomedicine*. New York: Plenum Press, 1982:55.

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When not to do a lumbar puncture

Sir,

Dr Addy, writing of meningitis, says that he will consider

treatment without lumbar puncture when a child 'has fundoscopic evidence of raised intracranial pressure.'¹ He may not intend the implication, but to many his statement will imply that optic disc swelling is a feature of increased intracranial pressure in acute illness. Although it is well recognised that papilloedema is commonly present when chronic or subacute conditions (tumour, abscess, lead encephalopathy, etc) present acutely, it must be exceedingly rare in acute pyogenic meningitis or indeed other short duration illnesses with brain swelling and high intracranial pressure.

This does not mean that fundoscopy should be neglected. Retinal haemorrhages may be prominent in meningococcal septicaemia in the absence of any purpuric skin rash. We have seen two such cases. In one, the diagnosis was delayed because non-accidental injury was wrongly suspected. In the other, a combative child with diarrhoea and vomiting, retinal haemorrhages were not recognised until after lumbar puncture and intravenous fluids, and fatal brain swelling ensued.

Reference

- ¹ Addy DP. When not to do a lumbar puncture. *Arch Dis Child* 1987;62:873–5.

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Dr Addy comments:

I accept that papilloedema must be rare in acute meningitis. In the typescript of my annotation I wrote 'fundal signs of raised pressure are not to be relied upon.' This was changed in the published version to 'fundal signs of raised pressure alone are not adequate.' The message remains the same.

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