



A toddler with intermittent mydriasis

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A 19 month old boy presented to the eye emergency department after his mother noted four episodes of an enlarged left pupil over one week (fig 1). Examination showed a 5 mm reactive right pupil and an 8 mm non-reactive left pupil. A unilateral dilated (mydriatic), non-reactive pupil can be caused by trauma, third nerve palsy, Adie's pupil, benign intermittent mydriasis, or drug side effects. Further questioning revealed a recent exacerbation of asthma, which led to the child's mother struggling to deliver his ipratropium inhaler, on occasions misdirecting it towards his eye. Ipratropium is an anti-muscarinic that inhibits the sphincter pupillae, producing a prolonged mydriasis. Failure of pupil constriction with pilocarpine suggests pharmacological mydriasis. On follow-up the boy's pupils had returned to normal with no further episodes and he was discharged.



Patient consent obtained.

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