COMMON GP QUERIES
IN INFANCY AND CHILDHOOD
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CARDIAC MURMUR
Cardiac murmurs are common in infancy and childhood. Although the majority are benign, any murmur must be carefully evaluated in order that a significant lesion is excluded. If there is any suggestion of cyanosis or cardiac failure, ie tachycardia, tachypnoea, recession, sweating or failure to thrive, then immediate referral is indicated. Particularly in the neonatal period, immediate diagnosis and management can save lives.

In the healthy asymptomatic child, the murmur may well have been picked up during a febrile illness, which makes the diagnosis of a flow murmur very possible. In this situation, the child should be reassessed in the community in three to four weeks’ time. If the murmur persists, then referral is appropriate.

There is no longer a place for annual visits throughout childhood for a child with an undiagnosed murmur. After the second ‘hearing’, the child is referred for an echocardiogram, which is performed in Lancaster by the tertiary centre cardiologist.

COLIC
This is defined as excessive crying in an otherwise healthy thriving infant, which lasts for at least three hours per day, on at least three days per week, for at least three weeks. The crying typically occurs more in the evening. It generally starts in the early weeks of life, and persists until four or five months.

The infant appears to be in pain, may be inconsolable, with a bright red face, legs drawn up, and fists clenched. The abdomen may seem hard. There is often relief after the passage of wind.

In terms of management, it is essential that pathology be excluded, eg urinary tract infection or cow’s milk protein intolerance. Having excluded these, which is possible for the majority of infants, then the mother needs to be reassured and given a detailed explanation of the natural history of colic.

Some breastfed infants will respond to the exclusion of certain foods, eg milk and dairy, caffeine, citrus fruits, strawberries and spicy foods, from the mother’s diet.

Positioning the baby in a more upright posture helps release gas trapped in the stomach. For gas lower down in the small intestine, cycling the legs while lying the baby flat on his/her back may also be helpful.

Some babies gain relief from one teaspoon of grapefruit juice in water before a feed, herbal drinks or traditional over-the-counter remedies. There is no indication to change the feed unless there is evidence of cow’s milk protein intolerance. This is particularly important now that soya feeds as the sole nutrition are no longer recommended.

CROUP
This is an inspiratory stridor associated with a barking seal-like cough. It occurs commonly in children from six months to five years, in association with a viral upper respiratory infection. The child is typically a bit miserable during the day, then wakens in the night with the classic symptoms.

When a GP is called to see a child with stridor, it is of prime importance that other pathologies, namely epiglottitis and inhaled foreign body, are first excluded. This can be achieved fairly simply, by taking an accurate history and assessing the child. In spite of having received the Hib vaccine, epiglottitis may still occasionally occur.

Most cases of croup can be safely managed at home. Definite indications for admission are cyanosis, agitation and significant respiratory distress.

For a child with only a mild stridor and mild tachypnoea (<35/minute up to 12 months; <25/minute over 12 months) with no other worrying features, the GP may feel it is appropriate for the child to remain at home. Simple management advice includes maintaining a calm atmosphere for the child, allowing him/her to choose a comfortable position, warm fluids, steamy atmosphere, paracetamol and a vapour rub.

Some GPs like to give dexamethasone. This is fine, as long as parents are given clear instructions of symptoms which should prompt them to seek medical advice again. The dose is 0.2-0.3 mg/kg.

HAEMANGIOMA
(a) capillary/strawberry mark This is not present at birth, but can appear on any part of the body, usually between two and four weeks of age. It is more common in premature infants. It may grow rapidly over the next few weeks into a lobulated well-demarcated bright red lesion, which usually stops growing by six months, and starts to involute by 10 to 12 months. This is evidenced by increasing white areas at the base and within the lesion (ie strawberry appearance). Ninety percent disappear by three years of age.
Refer only if there is a risk of obstructing vision or airway. Advise that if scratched, it may bleed profusely. If so, elevate and apply firm pressure.
(b) cavernous haemangioma This is present at birth on any part of the body. It is spongy and compressible. The overlying skin is often bluish or vascular. Refer if growth is disproportionate, or there is a risk of compromising vision or airway.

(c) macular/stork mark This is a capillary vascular mark, usually symmetrical and present at birth on either the forehead or back of the neck. Those on the face, even the most extensive ones, will disappear within a few weeks. Those on the back of the neck generally persist throughout life, but do not grow disproportionately in size.

HEARING

If there is concern about a child's hearing at any age, then a direct referral may be made as follows:-

Lancaster, Morecambe and Carnforth
Carnforth Clinic, Market Street, Carnforth, Lancashire LA5 9JU. 01524 738908

Kendal and South Lakes
Flaxman's Court, Westmorland General Hospital, Kendal, Cumbria LA9 7GL. 01539 795908/795900

Barrow and Furness
Prospect House, 3 Prospect Road, Barrow-in-Furness, Cumbria LA13 9AA. 01229 814222

HIPS

All babies born in hospital will have been examined for evidence of dislocated/dislocatable hip. If found, the baby will have been referred to Paul Marshall, consultant orthopaedic surgeon, who works in all three hospitals. Additionally, all 'at risk' infants (breech/oligohydramnios, talipes, torticallis, clicky hip and 1st degree relative with hip dysplasia) are scanned at about six weeks of age. The mother is given the result at the time of the scan. A letter will only be sent to the GP if a problem is identified.

If the GP or health visitor has concerns about an infant who has not had a scan, then refer to Mr Marshall directly (ie not the paediatric department). For infants below five months of age he will arrange a scan. If this is normal, then no formal outpatient review will be arranged. For children over five months, a scan is no longer reliable, so he will arrange outpatient review.

HYDROCELE

This arises from accumulation of fluid in the processus vaginalis which has failed to ingavinate following descent of the testis. It is a cystic swelling which transilluminates brilliantly, cf inguinal hernia and testicular torsion. The majority will resolve spontaneously by one year of age. If no sign of resolution by this age, then refer to a paediatric surgeon.

INGUINAL HERNIA

This results from the persistence of a widely patent processus vaginalis. In infants, there is narrow internal inguinal ring, which greatly increases the risk of incarceration. Inguinal hernia requires urgent referral to the paediatric department. Parents must be instructed that if there are any signs of incarceration, they must seek immediate medical advice. For infants below six months of age, all surgery is referred to a tertiary centre.

JAUNDICE

See separate article on page 229.

LABIAL ADHESIONS

This is a fairly common condition, particularly in young girls, where the labia minora become firmly adherent to each other, leaving only a small gap through which urine is voided. The adhesions often become firmer with the passage of time. The condition is usually noticed around 12 months of age, and the mother is naturally anxious that her daughter may have an absent vagina.

The management is total reassurance. In the past, oestrogen cream has been applied daily, resulting in the adhesions separating. However, they may recur, only to resolve spontaneously when the girl's natural oestrogen levels rise around puberty. It is therefore more sensible not to treat in infancy, but to wait for natural resolution. In the unlikely event of the adhesions persisting, then treatment is appropriate.

MMR VACCINE

In spite of reassurance, many children are still being referred for their MMR vaccination to be done in the day care unit of the children's ward. This is no longer necessary for egg allergy, or any other allergy.

A multitude of international studies have demonstrated that even in children with an anaphylactic reaction to egg, there is no increased incidence of adverse reaction to MMR compared with non-allergic children. Mothers and health visitors should therefore be strongly reassured. Because we believe that MMR in hospital is better than no MMR at all, we continue to oblige when asked. However, to date we have seen no adverse reaction. We would prefer these children to be immunised in the community.

SACROCOCCYGEAL PIT

This is a dimple or blind pit in the midline of the sacral coccyx region: most low-lying ones are benign and require no treatment.

Management

a) For low-lying, ie two vertebral spaces below highest point of iliac crest:
These are blind ending and therefore benign. Reassure parents that the pit will persist throughout life, but not cause problems. It must be kept clean but not probed. If any local inflammation then seek medical advice.

b) For higher SC pit ± associated hairy lesion/vascular lesion/swelling:
These should have been picked up on the routine neonatal check. There may be involvement of the nerve supply to
the lower limbs, bladder or anus. Most will be referred to a tertiary centre, and kept under regular hospital surveillance.

**UNDESCENDED TESTICLE**

Two-thirds of undescended testes in newborn infants will descend, usually by six weeks in term and three months in pre-term babies. Any testis which has not descended in the first year of life will not descend spontaneously. Types include:

(a) **unilateral UDT**
   (i) ectopic testis – descends normally as far as external inguinal ring then deviates in the superficial inguinal pouch to perineal, suprapubic or femoral ectopic site
   (ii) retractable testes – cremasteric reflex in young children will draw the testis up but it can be manipulated down to the bottom of the scrotum
   (iii) anorchia.

**Management**

- Explain to the parents that one of the testes is not palpable but may descend within the first few months.
- Refer to paediatric surgical outpatients at six months of age.

(b) **bilateral UDT**

This should have been picked up on the routine neonatal check. If not, then refer urgently to the paediatric department. This requires urgent investigation, in particular to exclude endocrine or intersex problem.

**TONGUE TIE**

This is a short lingual frenulum leading to parental anxiety about feeding difficulties or speech problems.

The parents should be reassured that the tongue will grow from the distal tip. It does not cause feeding difficulties or speech problems. Referral is not indicated.

**UMBILICAL GRANULOMA**

It is common for umbilical granulomas to form in the umbilical stump after the cord has fallen off. Rarely, there can be a urachal remnant underlying this, in which case urine may be seen coming from the area. This needs urgent referral.

In the vast majority a straightforward granuloma will resolve in time. The mother should be advised to clean the granuloma with an alcohol wipe after each nappy change. If it does not resolve after several weeks consider the use of silver nitrate sticks to be applied after protecting abdominal skin with vaseline and leave area exposed for 10 minutes after application. This should only occasionally be required.

**UMBILICAL HERNIA**

This arises due to separation of rectus muscles. It is more common in ex-prems and babies who cry a lot. Intestinal obstruction does not occur. It disappears spontaneously as rectus muscles become stronger and most resolve by two years of age.

Parents must be reassured that the hernia may get bigger initially but will then start to reduce spontaneously as the rectus muscles become stronger – usually after six months of age. Explain that the hernia will become more prominent when the baby cries, due to increased intra-abdominal pressure, but this does not mean that the hernia is causing pain. These hernias do not obstruct and do not require surgery.

**URINARY TRACT INFECTION**

See separate article on page 222.

*Note: Parent information sheets on many of the above conditions are available from the children's day care unit. They are freely available to GPs, health visitors and parents.*