

haemorrhagic telangiectasia (HHT) has been performed for more than 30 years, in order to diagnose and/or treat pulmonary arteriovenous malformations (PAVMs). Childhood screening thoracic CT scans are currently recommended international practice [2]. Our aim was to explore if breast cancer rates differed in HHT patients compared to controls.

**Methods** To provide sufficient power to compare breast cancer rates in HHT patients and controls, we developed a questionnaire capturing data on multiple relatives per respondent, powered to detect differences in breast cancer rates. Blinded to cancer responses, reports of HHT-specific features allowed assignment of participants and relatives as HHT-subject, unknown, or control.

**Results** By data download on 30.6.2012, 1,307 participants (including 1,012 HHT-subjects, 142 controls) had completed the international questionnaire, with the majority of respondents residing in North America. Ages (medians 55/53 ys), gender (65/65% female) and general demographics were similar between the groups. Combining data of participants and relatives resulted in a control-arm of 2,817 (52% female), and HHT-arm of 2,166 (58% female). Median ages were 77ys [IQR 65–82] and 66ys [IQR 53–77] respectively. Rates of breast cancer in the control group matched the age standardised frequency reported by Globocan for the general population, with a ratio of observed/expected incidence of 1.22. As expected, cancer rates increased with age ( $p < 0.0001$ , all cancers). Following age-adjustment, breast cancer was reported significantly more frequently for the HHT group than controls (quadratic regression age-adjusted OR 1.52 (1.07, 2.14,  $p = 0.018$ ).

**Conclusions** Individuals with HHT may be more likely to develop breast cancer. Further study is required to validate, and to assess if any excess is related to radiation exposure, or other factors. Nevertheless, given the rationale for PAVM screening programmes relates to risk reductions in adult life, the data support the widespread view that PAVM screening CT scans should be postponed until after puberty.

#### REFERENCES

1. Matthews *et al*, *BMJ*. 2013 May 21;346:f2360.
2. Faughnan *et al*, *J Med Genet*. 2011 Feb;48(2):73–87.

#### P84 HOW WAS IT FOR THEM? EXPERIENCES OF PARENTS OF CHILDREN UNDERGOING SURGICAL TREATMENT FOR EMPYEMA THORACIS

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**Introduction** Opinion is divided regarding the management of empyema thoracis in children. There is wide regional variation in treatment, which is only partially related to variations in the availability of skills and resources. There is currently no published evidence of parent experience of treatment of empyema thoracis in children.

**Objective** To explore the experiences of parents of children who have undergone definitive surgical treatment for empyema thoracis.

**Methods** Qualitative, face-to-face, semi-structured interviews with parents of children who had undergone definitive surgical treatment for empyema thoracis. Methodology: interpretative phenomenological analysis. Participants were recruited from a

large UK teaching hospital between December 2012 and March 2013. They were interviewed in hospital just before discharge. Parents of 8 children aged 11 months to 6 years, 8 mothers and 2 fathers (2 sets of both parents).

**Results** The overarching theme revealed in all of the parents' accounts was trust. The parents' perceptions of development or undermining of trust was influenced by several factors. They include: communication and interactions with staff; information provision and methods used to provide explanations including use of visual aids; staff competence demonstrated by knowledge and experience; evidence of team-work and non-verbal actions such as smiling, eye contact and perceived attitude. The establishment of trust also differed through the stages from GP referral, admittance to secondary and tertiary hospitals, peri- and post-operative phases.

Additionally the accounts revealed that parents were relieved when surgery was undertaken. Most parents were pragmatic about the scars following surgery, but considered that *all* of the scars were significant, not just the thoracotomy scar.

**Conclusions** Verbal and non-verbal communication used by staff when talking to families can have a significant impact on the development or undermining of trust. This can affect parental perception of competence and care provided by practitioners.

#### P85 HOME AND SCHOOL DIRECTLY OBSERVED THERAPY IN A CHILD WITH DIFFICULT AND LIFE THREATENING ASTHMA

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**Background and aim** We report the case of a child with difficult and life-threatening asthma whose control improved with directly observed therapy (DOT). School based DOT improves adherence<sup>1</sup> but to date there are no publications of combined home and school DOT.

**Case report** The child was commenced on Beclomethasone aged 4 years following repeat admissions with asthma. Clinic attendance was erratic. Occasionally she arrived in clinic with wheeze and saturations in the 80's. Health behaviour did not change despite warning parents about risk of death. A common assessment framework (CAF) was initiated.

Following a life threatening asthma episode (aged 6 years) maintenance therapy was increased to Seretide 250 mcg bd (spacer) and Montelukast 5mg od. IgE was 1556 and House Dust Mite RAST positive. Clinic attendance and asthma control temporarily improved. Following another two admissions with life threatening attacks SloPhylline 250mg am/125mg pm was added. Theophylline levels were found to be <2 mg/l after a further serious admission. Maintenance oral prednisolone was commenced and she was referred to tertiary hospital for consideration of Omalizumab. She was concurrently referred to Social services.

At case conference she was put under a child protection plan for reasons of child neglect. DOT service at home and school was commenced. Non-attendance to clinics immediately ceased. There were no further hospital admissions. She was weaned off prednisolone. SloPhylline was reduced to 125mg bd. A lower dose of Seretide was attempted but unsuccessful.

DOT was funded by Social services. The cost was £24.24 per week term-time and £37.66 per week during school holidays.