### 1284

# HUMAN PEDICULOSIS AND ANAEMIA: A "LOUSY" ASSOCIATION

M.A. Anjay<sup>1</sup>, V. Palanivel<sup>2</sup>, V. Datta<sup>3</sup>, B. Lloyd<sup>4</sup>, P. Shute<sup>5</sup>

<sup>1</sup>Department of Paediatrics, Addenbrooke's Hospital, Cambridge, <sup>2</sup>Department of Neurosciences, Great Ormond Street Hospital for Children, London, <sup>3</sup>Department of Paediatrics, Norfolk and Norwich University Hospital, Norwich, <sup>4</sup>Department of Paediatrics, Royal Free Hospital, London, <sup>5</sup>Department of Community Paediatrics, Worthing Hospital, Worthing, UK

Background and aims: We aim to

- 1. Present three cases where severe head lice infestation was associated with significant iron deficiency anaemia.
- 2. Critically evaluate the available evidence to identify whether head lice infestation can cause anaemia by chronic blood loss.

Methods: Case series; literature review

**Results:** 3 patients were seen with head lice hyperinfestation and severe anaemia-

- 1. A 3-year-old girl with poor hygiene and developmental delay
- 2. The 5-year-old sibling of the above child
- 3. A 15-year-old girl, under psychiatric follow up.

Extensive laboratory investigations and dietary evaluation failed to reveal a cause for anaemia. The anaemia and head lice infestation could well be coincidental findings.

Literature review identified studies in cattle which showed strong association of louse infestation and anaemia. No similar studies were identified in humans. Head lice can cause anaemia in humans if, over a period of time the amount of blood sucked overtakes the rate of production of red blood cells (RBC). This depends upon a fine balance between different variables in the host and parasite which are summarised in **Image 1**.

Parameter	Available Data
No. of lice on the head	Average of 10 to 30; Higher numbers up to 2657 reported.
Life span	3-4 weeks
Male/Female Ratio	Relative sex ratio, male/(male + female) = 0.4
Average no. of eggs laid per day	10
Rate of attrition	Variable
Frequency of feeding	No hard data; Assumed to be 3 per day
Amount of blood sucked	Adult female louse: 0.0001579 ml  Adult male louse: 0.0000657 ml  Nymph: 0.0000387 ml

## [Image 1]

Based on these values a review concluded that there will not be clinically significant blood loss. However, mathematical modelling using differential equations suggests that anaemia can occur over approximately 6 years in untreated severe infestation.

**Conclusion:** Anaemia due to head lice is unlikely, in an otherwise healthy child. However untreated, prolonged and severe infestation might lead to anaemia in the long term.

#### 1285

# MOTHERS PERCEPTIONS ABOUT THE HEALTH CENTER PRACTICES ON CHILD FEEDING: AN EXPLORATORY QUALITATIVE STUDY IN DAMAVAND, IRAN

N. Salarkia, M. Amini, T. Zoghi, M. Eslami

Nutrition Research, National Nutrition and Food Technology Research Institute, Shaheed Beheshti Medical University, Tehran, Iran

**Introduction & purpose:** Health care personnel have an important role in supporting childhood feeding. This study conducted to explore mothers' perceptions about primary health care services to support child feeding in Damavand in 2008.

**Methods:** In this qualitative research, perceptions of mothers were explored through focus group discussions (FGDs). Eleven FGD sessions were arranged with groups of mothers with below 2 years old children in urban and rural areas of Damavand.