Taken from **The Journal of The Anglo-Ethiopian Society**

Report on a lecture given to The Anglo-Ethiopian Society by Dr Claire Fuller, 18th June 2009

By Anne Parsons.

Dr Claire Fuller is a consultant dermatologist based in south-east England but since 2002 has been involved with a group working with mossy foot patients in Wolaita. In that year the British Embassy in Addis Ababa had been asked for financial help by this group and Professor Eldryd Parry (who founded the Tropical Health Education Trust) recommended that Claire should evaluate the project she had a personal interest in tropical skin diseases and also experience, gained at King's College Hospital London, of conditions as they present in non-white skin.

During the evening we saw many photographs depicting mossy foot (which is also known as podoconiosis or non-filarial elephantiasis). It is a disease of poverty and occurs worldwide in highland areas with wet red volcanic soil. Shards of fine volcanic ash composed of aluminium silicates penetrate the skin in people who walk and work barefoot. An inflammatory reaction occurs in the lymph vessels serving the legs and repeated reactions cause scar tissue and blockage, ultimately leading to gross swelling of the feet and legs. Early symptoms are puffy sausage-like toes and swollen ankles. The skin then becomes rough, lumpy and bumpy with mossy looking nodules hence the name mossy foot. Secondary bacterial and fungal infections of the skin are common, frequently producing extremely offensive odours. Patients experience pain and difficulty in walking and tend to be socially ostracised because of their smell.

The risk factor for developing mossy foot appears to be genetically pre-determined as the condition is found to cluster in families. The problem seems to bin in the way the silicate shards are handled by the body, rather than in a susceptibility of skin permeability. About 10% of people living in wet volcanic highlands may be at risk and therefore many thousand, if not a few million, people in Ethiopia may develop the disease.

Mossy foot has only really been studied in detail relatively recently. Records started Wolaita in 1997 and it was estimated then that there were 2000 cases; two years later in 1999 the numbers were revised to 20,000, and by 2005 a total of 12, 000 were believed to be affected. There has not been a World Health Organization intervention programme and this has meant the disease has not been recognised by the Ethiopian Ministry of Health and has not attracted Government funding. Hopefully this situation will change.

Simple and cheap treatments can have dramatic result. Good skin hygiene – washing well with soap and water and disinfectant (chlorine-based) – is essential. Secondly, it is necessary to treat any associated infection. Whitfield's Ointment is used (containing the anitfungals benzoic and salicylic acids). The skin should also be moisturised regularly. Compression socks and shoes or boot specially designed to fit over the enlarged limbs will then help reduce the swelling. We were shown an

amazing before and after photograph of a young man who had diligently followed the hygiene and anti-infective programme together with use of socks and shoes; after only 3 months his gross swelling had been reduced by perhaps 80% and he was able to return to the community and function normally. Part of the rehabilitation program involves patients acquiring new skills such as shoe making and producing custom-fit shoes for tother patients. In their spare time they can make regular shoes to sell for profit and can also do shoe repairs.

But perhaps more importantly how can mossy foot be prevented? One of the key factors is to identify high-risk families where there is already a member affected and get the children in that family to start waring shoes as soon as possible.

There was lively and knowledgeable audience participation throughout the evening. Chris Grant pointed out that LInk Ethiopia might be able to help with education at school level and with identification of family sufferers. Alternative disinfectants were discussed; and the feasibility of sending shoes from abroad was raised.

Our thanks go to Claire for a most informative lecture on the very neglected, but yet rather easily prevented and treated disease. We wish her success with her work. Readers can find further information on mossy foot (including lots of photographs!) on the website of Mosssy Foot UK, the charity Claire has set up: www.mossyfootuk.com