

About the Reflex Microscope

Dr Michael Mars, Consultant Orthodontist at GOS, supplied us with the following information.

The reflex microscope is a precision device for measuring dimensions in all three planes of space. The measurements are recorded on a computer and analysed using a special programme.

Since its acquisition, partly funded by CLAPA GOS, it has been used in two research projects:

- The first was by Dr Nazan Adali to determine whether pre-surgical orthodontic treatment (the fitting of baby plates in new born babies with cleft lip and palate) was beneficial in narrowing the cleft before surgery.

This treatment has been controversial since it was first introduced over 50 years ago. The plaster models of 80 patients with unilateral cleft lip and palate made from impressions taken at birth, just before lip repair and just before palate repair, were measured in two groups, those who had and those who hadn't received this treatment.

Some might say, surprisingly, that no significant differences were found between the two groups. This was a factor in the introduction of new policy for the team; pre-surgical orthodontics will not be performed on babies with unilateral cleft lip and palate.

Dr Adali attained her MSc in orthodontics with this research as her research project. She presented her findings at the Craniofacial Society Annual meeting in Dublin where she was presented with the prestigious Arnold Huddart silver medal for the best research paper.

- The second research project is in progress and is examining several hundred dental study models from the unique Sri Lankan Cleft Lip and Palate Project archive. Previously such studies had to be undertaken outside GOS with the material being transported out and returned and ran the risk of loss and damage.