

**PHILIPPINE AMERICAN GROUP OF EDUCATORS AND SURGEONS
PAEDIATRIC CLEFT LIP & PALATE MISSION
SAN PABLO CITY, LAGUNA, PHILIPPINES.
FEBRUARY 2012.**

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In February 2012 I joined the 'Philippine-American Group of Educators and Surgeons' (PAGES) on their annual cleft lip & palate mission, for the third time. PAGES is a charitable organisation founded 22 years ago, annually providing teaching to local healthcare professionals and students and treatment for children with congenital cleft lip and palate deformities. The international team of volunteers comprises surgeons, anaesthetists, paediatricians, nurses and support staff. The Philippines (twelfth most populous country in the world) is an archipelago in the western pacific of over seven thousand islands with a tropical climate, with only \$136 spent on healthcare per capita, versus \$3,399 in the UK. The principal language is Tegalog, with over a hundred dialects, and English is widely spoken.

Craniofacial abnormalities are the commonest manifestation of birth defects, the most frequent being cleft lip and/or palate, with a genetic and environmental aetiology.

The PAGES team visits the Philippines every February for two to three weeks, this year we were based at the 'San Pablo Medical Centre' (SPMC) in Laguna. The original site had been affected by a typhoon, so a last minute venue change meant a smaller team comprising three consultant surgeons and a fellow, four anaesthetists and one anaesthesia practitioner, a consultant paediatrician, five nurses and a few support staff.

A fire at the SPMC a few years ago damaged the theatre complex and during this period of rebuilding the theatre facilities have been almost non-existent. This led to our imaginative use of the clinical teaching rooms of the affiliated Nursing College. We set up an outdoor pre-operative screening area, three theatres with equipment which PAGES provided locally, a small recovery room and post-operative ward area. The students attending the college were immersed in the clinical work during our week at the SPMC learning about every stage of the patient journey.

As the first anaesthetist to arrive on site with our lead Dr Nicodemus, I was responsible for sorting out and setting up the anaesthesia equipment, including checking disposables, many of which had been used multiple times, non-disposable items such as laryngoscopes, the drug cart and anaesthetic machines. I was able to spend time in pre-operative screening with the paediatrician and surgeon, with the opportunity to gain insight into the decision-making process for surgery.

Patients are not seen pre-operatively by an anaesthetist, but have intravenous access sited by the nurses and paediatricians. Anaesthetic technique consists of intravenous ketamine sedation in the waiting area, with children carried into theatre, propofol intravenous induction of anaesthesia, suxamethonium paralysis (with variable action due to the lack of refrigeration) and maintenance with isoflurane in 100% oxygen (cylinders) via a circle using old Datex-Ohmeda

machines with CO₂ absorption. Infraorbital nerve blocks using bupivacaine are performed for cleft lips and for cleft palate repair 1-2 mcg/kg fentanyl is given, when available.

Monitoring consists of precordial stethoscopes, manual sphygmomanometers and pulse oximetry. Each operating theatre has multiple operating tables, creating cramped and noisy working conditions. There are no operating department practitioners (ODP) therefore it is my responsibility to ensure I have all the necessary equipment, drugs etc.

There is a recovery area staffed by PAGES nurses and all children stay overnight on the ward with their parent or relative.

The international team are supported by local staff, with students encouraged to participate, learning through clinical exposure. Local surgical and anaesthetic trainees also assist with supervision by PAGES members.

Safety is very important and the ethos of delivering treatment to the highest standard is taken seriously. Institution of the World Health Organisation Surgical Safety Checklist has been slow, but PAGES are planning to adapt the checklist to include factors important in cleft surgery with implementation for all procedures from next year.

The mission provides hope for the children, giving them the chance to develop without the stigma of a congenital defect. It prevents them from being ostracised in society and allows them to fully integrate and benefit from every opportunity available.

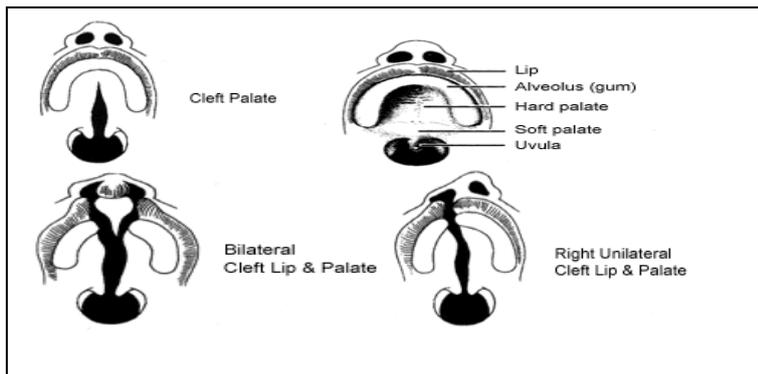
I have learnt a huge amount; integrating into an international team, learning new anaesthesia practices, developing skills involving a shared airway and obtaining competence in anaesthetising patients from neonates right through to adults with limited monitoring and resources. Personally I have provided anaesthesia for one hundred and twenty patients during six weeks in the field, and to date the mission has treated over 10,000 children.

I would like to thank:

- AAGBI IRC for a travel grant towards my 2012 trip.
- My friend and fellow anaesthetic trainee Dr Mark Catolico for introducing me to the PAGES team;
- The PAGES co-ordinators for allowing me to be part of their team;
- Drs Rigor, Nic Nicodemus and Hector Nicodemus for all their anaesthetic wisdom and knowledge;
- The families who have entrusted me with the care of their children.



PAGES team in Cabanatuan City, 2009.



Any combination of cleft lip/palate is possible.



Author in theatre demonstrating use of precordial stethoscope.



'Jeepney' - popular form of public transport in the Philippines.