# Cambodia: an extended sabbatical

Working in Cambodia has been a very different experience from working in America for this orthopaedic surgeon. Some of the challenges are described, and the assistance given by a Hong Kong foundation and Hong Kong personnel is acknowledged.

## The experience of an orthopaedic surgeon

I started my sabbatical working for the American Red Cross at 8 am on a Monday morning in October 1992, in a provincial hospital in Cambodia. We were just finishing the morning staff meeting when a motorbike dragging a cart drove into the courtyard. With the small group of other staff, I went over to look at what was in the cart. Blood was everywhere. There were three young men in the cart. One had had his hand and half his forearm 'blown off'. Another had a huge laceration across his face, and the third was slumped in the corner, covered in blood, but with no obvious surface wounds. I was told that one of the men had been hoeing a rice field, and had exploded a mine that was the cause of the mens' wounds.

I stood back and watched as hospital staff quickly unloaded the two patients with the obvious wounds, putting the one with the facial laceration on a gurney, and carrying the one with the traumatic amputation into the small, dark operating room (OR). There were two surgeons present, while everyone else was a junior doctor, fresh out of medical school, or a male nurse. They invited me to carry out the operation, which seemed a challenge, and I accepted. A quick change into a scrub suit gave me the opportunity to see someone operating on the facial laceration on the verandah of the OR, and there was a little group of staff around the third patient still in the cart.

The operation took about 2 hours, as in addition to finishing the traumatic amputation, it was necessary to do a laparotomy and repair a couple of intestinal holes caused by mine fragments. The patient was then taken to a side room, and we went outside to see what had happened to the other two victims. The young man with the facial laceration had apparently gone home, but the third patient was still slumped in the cart. He had not been moved, and no one was with him. I went over and examined him, and found that he was in shock. Much of the blood that covered him appeared to be his own. He had a small laceration in his left groin, which had obviously cut the femoral artery and it was still bleeding. No one seemed to have noticed or addressed this, so I insisted that he be brought into the OR, where I immediately tried to stop the bleeding with anaesthetist support. It was not difficult to get both severed ends of the femoral artery exposed and clamped off, and I decided to attempt to anastomose the vessel rather than tie it off, as the surgery had not taken long up to this point. This was a mistake, as the anaesthetist told me at that moment that the patient's blood pressure was dangerously low. In the next frustrating 20 minutes, it became clear that there was little experience of acute resuscitation and little could be done. Our difficulty communicating in French (I could not speak Khmer, and nobody else could speak English), combined with the lack of equipment and supplies, rendered the situation irretrievable.

It was now lunchtime I was told, so very dejectedly I set off for lunch. On my way, I decided to check the patient with the amputation. I was pleased with my surgical efforts in this case, as I had managed to retain the elbow. I went into the dirty and dreary surgical ward. There were no staff present, and the patient was now as dead as the one I had just left. He was lying flat on his back, with no attendant, and had vomited, aspirated, and died, within an hour of leaving the OR.

I did not sleep well that night. It had not been the most successful day of surgery I had ever experienced, and I constantly reviewed the things that I might have done differently had I better understood the situation, and the mistakes I had made. Next day I confronted the hospital director, and told him that I did not believe the injuries had resulted from hoeing a rice paddy. I was eventually told that the men had found a mine, and were trying to prise it open to remove the explosive when it went off. I did not feel much better about the deaths, but it seemed that they had been the result of a whole series of mistakes.

It was a dismal start to a 6-month rotation, but thankfully, nothing else turned out quite as badly. By the end of my stay, the number of operations had been increased from four or five a week, to four or five a day, and we had even kept alive a couple of traffic victims whom the Khmer doctors had decided could not be saved due to "very weak blood pressure." I had grown to like my Khmer colleagues, and to accept their remarkable lack of general medical knowledge. They were the products of the destruction of the country, and all so young, but they worked hard, and tried hard. When I left after my 6 months, however, I did not think I would be back.

Four years later however, I was asked to return to Cambodia to set up a small centre for the treatment of facial injuries in landmine victims. I expanded the mandate to include any disabilities that could be treated, and with a grant of US$20 000 from a private donor, we started work in 1998 in the National Rehabilitation Center, Kien Khleang. Over the past 5 years, the project has grown. We now employ nearly 30 Khmer staff, and carry out almost 2000 operations a year. Our mission is to offer free operations to poor, disabled people, and to train Khmer staff to complete these

operations and run the facility. We have enough anaesthetic expertise to enable us to carry out facio-maxillary, orthopaedic, plastic, and ophthalmic operations. The majority of cases seen are limb stump revisions, cleft lip and palate repairs, burn contracture releases (especially for victims of acid burns), club foot reconstructions, and surgery for polio deformities.

Our main problems with infrastructure involve electricity, clean water, sewage disposal, and flooding in the rainy season. Most of the time, water is pumped from the Mekong River, filtered and sterilised. Occasionally the flow is of dirty water, clearly the result of switching to the emergency bypass valves that circumvent the whole system. It is intensely frustrating to try to determine how this has happened, but we are reluctant to abandon the bypass valves as they are useful when the pump fails. Flooding increases every rainy season, as nearby land is filled to the level of Route 6A, 2 metres above the level of the compound, and we cannot afford to raise all the buildings 2 metres. No permanent solution is in sight for the problems of either sewage or flooding, but clean water from the city should be a reality within the next 3 months, obviating our problems with the Mekong River.

Finding enough money to run a programme such as ours is a constant problem. We have been very lucky that the Kadoorie Charitable Foundation of Hong Kong has supported the majority of our running costs for the past 3 years, and that Dr Samman and Dr Irwin join us twice a year from the University of Hong Kong to assist. Since we provide care for poor, disabled people, there is no possibility that we could charge patients sufficient fees to cover their costs. Nevertheless, we hope to continue our current work, and to find a way to eventually make it self-supporting.

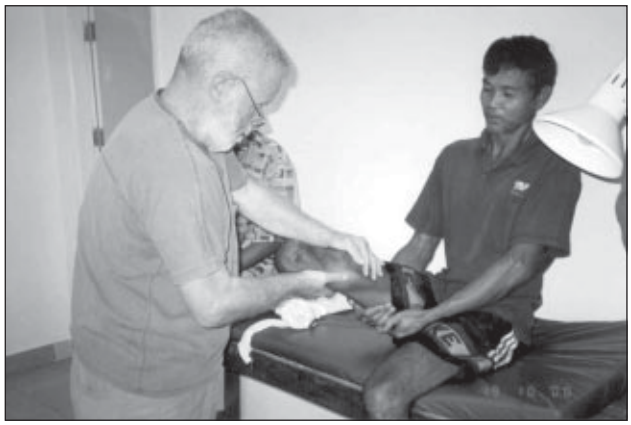

**Fig. Dr Gollogly examines an amputee**

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## Answers to CME Programme *Hong Kong Medical Journal* August 2003 issue

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**I. Dexfenfluramine and heart-valve regurgitation in Chinese patients with type 2 diabetes**

| | | | | | |
|---|---|---|---|---|---|
| A | 1. True | 2. True | 3. False | 4. True | 5. False |
| B | 1. False | 2. True | 3. False | 4. False | 5. False |

HKMJ 2003;9:271-7

**II. The effects of tobacco use on oral health**

| | | | | | |
|---|---|---|---|---|---|
| A | 1. True | 2. False | 3. True | 4. True | 5. False |
| B | 1. True | 2. True | 3. True | 4. False | 5. True |
| C | 1. True | 2. True | 3. False | 4. True | 5. True |
| D | 1. True | 2. False | 3. False | 4. True | 5. True |