TWO YEARS ON THE CHATHAM ISLANDS

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Making the decision to travel to the other side of the world when newly married is not, perhaps, everyone's idea of a perfect start to marriage. Both my wife and I, however, having done the Lancaster vocational training scheme, felt that we needed to stretch our clinical capabilities and we therefore decided to spend some time in isolated rural practice. Our reasons for travelling abroad were dictated by what we wished to gain from the experience. We wished to know if rural general practice suited us, and if we would be happy to jobshare. It was with these questions in mind that we were employed as resident medical officers on the Chatham Islands.

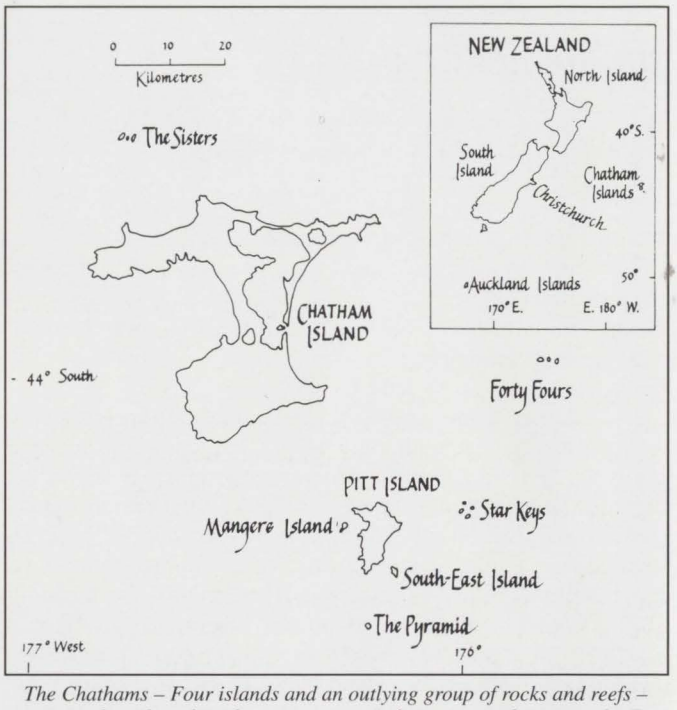
THE CHATHAM ISLANDS

The Chatham Islands are 870 kilometres due east of New Zealand, and are diametrically opposed to the UK in their position on the earth's surface, being the first land on which dawn breaks. This means, of course, that the islands will be the first place to welcome the new millennium. Being eight hundred and seventy kilometres (five hundred and fifty nautical miles) from the nearest referral centre made us the most isolated medical practitioners in New Zealand. The Chatham Islands are a group of ten islands, the largest of which is Chatham Island itself, which has 700 inhabitants. Pitt Island, the next largest island, is home to 50 islanders, and the remaining eight islands are solely inhabited by seabirds. As well as being geographically isolated from mainland New Zealand the islands are also ecologically unique, being the habitat of the sixteen rarest species of flora and fauna in New Zealand. The island economy is based on farming and fishing. The fishing industry is very prosperous and is based on the crayfish, or rock lobster. This makes the island the richest community *per capita* in New Zealand. There are more millionaires, more faxes and more Harley Davidsons per head than anywhere else in New Zealand. The islands' population itself is one-third European-derived, one-third Maori and one-third Moriori. The Moriori were the first inhabitants of the Chatham Islands and were defeated in battle by the conquering Maori tribes. The island population is employed in sheep and cattle farming and also in the fishing industries. As well as boat fishermen there are commercial divers and many of the island's women work in the fish-processing factories.

OTHER STAFF AND FACILITIES

The health centre was a three-bedded unit with a theatre which was also used as an obstetrics room and had emergency X-ray facilities. Any laboratory samples were taken to the mainland on one of the regular flights. The centre was staffed by Sisters of the Missionary Society of Mary and by a nurse who was the wife of one of the local fishermen.

There had been 70 doctors in ten years and Claire and I were, therefore, considered to be permanent doctors, as we fulfilled our two-year contract. It must be said that few people enjoy such an isolated lifestyle, and a big problem was that there was no-one with whom medical problems could be discussed rationally. We considered ourselves to be very fortunate to be sharing the position. Many doctors had tried the Chatham Islands on either a locum or 'permanent' basis and found the isolation and the perpetual 24 hour on-call very hard to tolerate. By job-sharing, we undoubtedly gave the islanders a better service, and we enjoyed the location more ourselves.



The Chathams – Four islands and an outlying group of rocks and reefs – constitute the ridge of a submarine mountain known to geologists as the East Chatham Rise. They break the surface of the Pacific Ocean 870 kilometres east of New Zealand, bisected by the latitude 44° South. This location and the convergence there of warm currents from the north and cold water from the south produces the islands' climate and weather: almost incessant wind (the 'Roaring Forties'), near-constant cloud cover, low sunshine hours, wet winters and humid summers.

As well as responsibility for the island population of 750, we were also responsible for providing medical advice to shipping within 1.1 million square nautical miles of the Chatham Islands. This is approximately 1% of the earth's surface. Dealing with queries from ships up to a thousand miles away brought its own problems, the worst one being the delay between advice being sought and the patient being seen. Transfer from a ship to the island also brought some hair-raising moments, and one of the many new skills learned was how to scale the side of a trawler in a four-metre swell at night. Very often the island was used as an aircraft carrier by the fishing vessels of the area, giving us medical emergencies which could have been dealt with much more efficiently had advice been sought earlier.

Patient transfer entered a new era on the island with the purchase of a second-hand ambulance from the mainland. This was manned by St John's Ambulance volunteers and we were heavily involved in the teaching and updating of skills. Claire and I felt that in this location it would be best for the volunteers to deal with different clinical scenarios. Perhaps the worst case which they could have been expected to deal with would have been a road traffic accident on the island occurring whilst the doctors were away on Pitt Island doing a three-monthly clinic. At the end of our stay all volunteers were able to cannulate and give fluids and were also trained in the appropriate use of oxygen. Cannulation, cryco-thyroidotomy and the insertion of an oropharyngeal airway were practised on dead sheep.

THE MEDICAL PROBLEMS

The range of medical problems was broad, although the majority were occupational traumas. The management options included:

- make investigations and treat on the island
- stabilise, investigate, and then transfer on the next scheduled flight
- stabilise as far as possible and then transfer on a chartered plane as an emergency

It will come as no surprise to general practitioners that we were providing healthcare on a budget and the cost of hiring a plane was ten times more than evacuation on a scheduled flight. Examples of illnesses which we dealt with on the island included myocardial infarctions which were inappropriate for steptokinase therapy, pneumonias, deep venous thrombosis and conditions requiring intravenous antibiotics. Examples of illnesses which could be stabilised and transferred on a scheduled flight included trauma which needed operative intervention (such as compound fractures and shark bites) and any condition which might require surgical intervention. All at-risk pregnancies were delivered off the island, and low-risk pregnancies were delivered on Chatham by ourselves and the nun-midwife. A plane was hired to evacuate a meningococcal septicaemia, a child with a depressed skull fracture over the middle meningeal artery, a case of the bends and also a woman who was bleeding vaginally, having had a cone biopsy performed on the mainland.

Perhaps the most hair-raising cases were psychiatric emergencies. It is in this sort of isolation that one realises the importance of having a good psychiatric team at hand. Along with the sole policeman on the island, we had to deal with a psychiatric patient who was threatening to kill himself (and anybody who approached him) with an AK 47 submachine gun. An acutely psychotic schizophrenic also posed significant problems. Both of these patients had to be restrained overnight in the single police cell and were flown out on the next available flight. There was a lot of family violence which gave us anxiety as to whether or not we should remove the victims from the island. Removal meant that the woman or child concerned would not, ideally, return to the Chathams, though many did. This led to the perpetuation of the cycle of family violence.

Most trauma was dealt with by ourselves, the majority of fractures being dealt with conservatively. Because of the work ethic embodied in the islanders, the use of Scotchguard was widespread, enabling men to continue working in the fields and at sea with a fracture. An example of this was a man with a fractured base of the fifth metatarsal who was in a below-knee cast. He covered the cast with an inner tube from a tyre so that he was able to shear his sheep. There was also a very high number of fishhook injuries. These fishhooks (see Fig 1) were large hooks which were often homemade out of fencing wire which had to be cut with boltcutters to pass through the flesh.

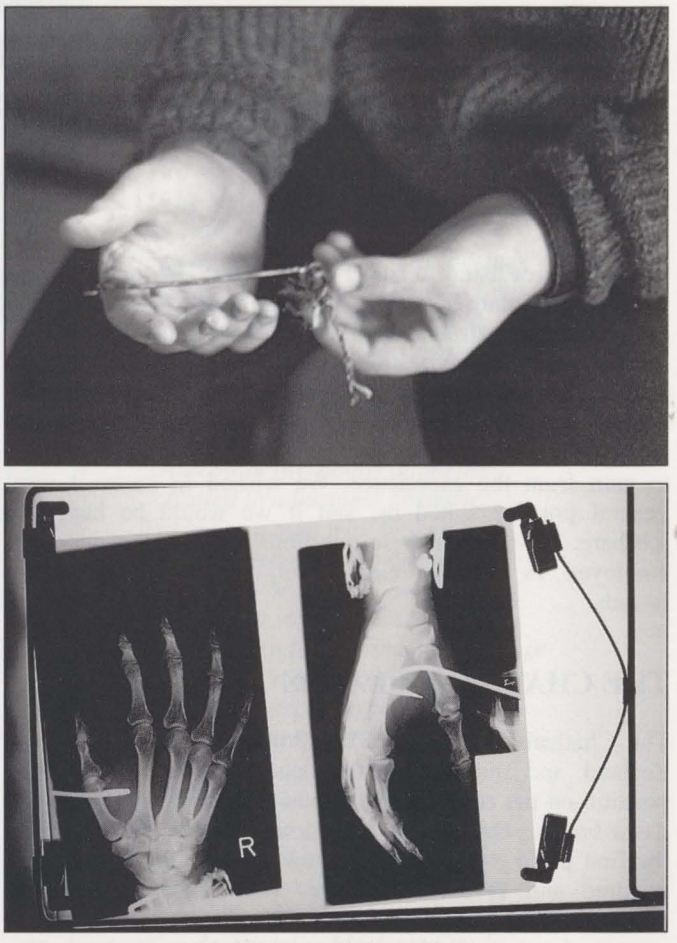


Fig 1 – X-ray and photo of hand

Due to the nature of the isolated agricultural community most of the veterinary work was performed by the farmers themselves. However, if a dog required suturing or an X-ray was taken to see if there was a broken bone, we would then be called upon to give our opinion. There were approximately four visits a year from a mainland vet, although he would only perform elective procedures and was obviously unavailable for most emergency work. Dogs are considered to be the only animals worth treating operatively, because their training is so arduous and their function is to make the farmer's life easier. All other sick stock was destroyed.

Our experience on the Chatham Islands, as well as benefitting us from a medical point of view, made us realise how important it was to enjoy non-work activities. Claire became a very competent scuba diver, upholsterer and aerobics instructor. My interests became fishing, and hunting the abundant wild pigs on the island. I was also a member of the local volunteer fire brigade.

We have discovered that we are indeed suited to rural general practice and also to job sharing. We have secured a jobshare position in the Borders area starting in June 1996.

We have both greatly broadened our experience in both emergency medical care and rural general practice. I would wholeheartedly recommend anyone wishing to work abroad to do so. Our thanks go to all the staff who guided us through the vocational training scheme in Lancaster, and to Mr Burton and members of the orthopaedic team who provided me with the experience which proved so useful.