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Pathologist's Trip to South Pacific Brings Child Accurate Diagnosis, Treatment to Ease Pain, and Consultation for Family's Understanding of Daughter's Disease

Many people think of a vacation to the South Pacific as a chance to get away from it all. With no infrastructure, bamboo huts, and the necessity to hike to get places and to eat what you hunt, fish, or gather, rainwater is a luxury for the approximate 120 residents on the island of Araki, not far from the Fiji Islands. One pathologist, Yvonne R. Hearn, MD, FCAP, went to visit her daughter Hillary, 23, who is in the Vanuatu Peace Corps, and found herself having to deliver a cancer diagnosis to the village leader about his four-year-old daughter.

The story begins with Dr. Hearn traveling by plane and boat to a small South Pacific Island that is two kilometers by one kilometer in size with approximately 120 residents, finishing the journey by hiking to reach the village where her daughter lives. Surprisingly, the villagers have cell phones, but modern medical care is not available; thus, proper diagnosis of a condition is not always accurate.

Hillary was sent by the Peace Corps to help the villagers to collect rain water as a draught comes almost every December, and rain water must be collected and stored to ease them through each year's draught. A marine biologist, Hillary knows everyone on the island and introduced her parents to every person when they arrived on land.

One child, Diana, the chief of the village's daughter, was thought to suffer from Downs Syndrome. As soon as Dr. Hearn saw the child's eye, she knew it was cancer.

"It was a transformative moment. I considered carefully how to break it to the parents as well as make life as pain-free as possible for this child," said Dr. Hearn. "I had not seen retinoblastoma since my training at Parkland Hospital in Dallas, Texas, over 20 years

ago. I decided to observe the child for awhile, meet the villagers, and carefully consider the environment and what I could do to help.”

“As a pathologist, I thought I might have the occasion to help deliver a baby or render first aid while traveling; however, I never anticipated making the diagnosis of retinoblastoma while visiting the South Pacific,” said Dr. Hearn.

“As soon as I saw her eye, the diagnosis was instantaneous,” recalled Dr. Hearn. “My next question was...in this environment, what could I do to help?”

From experience, Dr. Hearn grew concerned that Diana might already have brain metastases, and that it was only a matter of time until she would experience pain from bone metastases. While Diana did communicate well with her family and the other villagers, Dr. Hearn wanted to work with the family to gain a better understanding of their daughter’s disease as well a much-needed diagnosis. Downs syndrome doesn’t cause pain, but cancer could. If Diana began to behave in a manner which seemed fussy or difficult, she might actually be in pain. Consulting with Hillary as to whether or not it would be appropriate to meet with Diana’s parents to make them aware of Diana’s situation seemed the best step since Hillary knew each person on the island.

The village hosted a wonderful feast for the Hearn to welcome them to the island. After dinner, Dr. Hearn decided that in the child’s best interest, she must let her parents know that Diana had cancer—retinoblastoma—a malignant tumor of the eye.

Diana’s family was unaware that she had cancer.

“Both Hillary and Job the village elder, acting as my interpreters, helped me translate to Diana’s father, said Dr. Hearn. “I explained that Diana did not have Down's syndrome.”

Chief Uhu clarified that when Diana was an infant, the family had been told that Diana needed to have her left eye surgically removed. Unfortunately, the medical facilities in the South Pacific area where they live were limited; they did not have surgical instruments small enough to perform an enucleation on an infant or small child. In America, a child’s eye is removed at birth to prevent the cancer from spreading. The family was told at the medical facility that they must wait until Diana was six years old, hoping that the adult surgical instruments would be acceptable for her surgery at that time.

In Diana’s case, now approaching six, the cancer had most likely spread. Surgery next year would probably be too late. As a pathologist, Dr. Hearn suggested a few remedies to ease her pain as the cancer progressed.

“Of course her father was sad, but he appreciated knowing how he could help his daughter,” explained Dr. Hearn. “I explained how even having a bottle of acetaminophen ...so easy to get in the US but only obtainable three hours away by foot and boat...would be good to have on hand should Diana need pain relief.”

After sharing the news, pathologist, patient and their respective families sat together around kerosene lanterns in the tropical bush, watching fireflies and flying foxes (alias bats to Americans.) Chief Uhu Lele, Diana's father, her mother, and Job learned more of Diana's condition. The next morning, Chief Uhu asked if there were any specific pain medications that he could acquire should Diana need them.

Dr. Hearn assured Chief Uhu that she would research this back in the States and be back in touch.

Now back in the United States, Dr. Hearn has reached out to a local pediatrician in her area to talk about what can be done for Diana's condition, at the very least for pain. Dr. Hearn receives an occasional text message or cell phone from her daughter Hillary about Peace Corps adventures, and Dr. Hearn continues to offer consultation and comfort while helping to direct patient care for a child so many miles away that she met on vacation in the South Pacific.

Meanwhile, Dr. Hearn takes away from the experience that she enjoyed consulting with the family to help them better understand their daughter's disease, giving them an accurate diagnosis and suggestions to ease future discomfort for their child.

"As a pathologist, I like to interact with the patient and family. I miss that aspect in my practice" said Dr. Hearn. "Directing patient care, even on a small island, and working with the family to understand their child's disease is transformative in that it reinforces my desire to pursue opportunities to interact with patients and their families."

"In my daily practice, interaction with patients is often limited to performing a bone marrow or fine-needle aspiration. I now search for occasions to interact more with patients whether it be speaking engagements for disease prevention or explaining pathology reports to my patients," said Dr. Hearn.