

Marigolds in the CT scanner

■ Cite as: *CMAJ* 2021 July 19;193:E1094-5. doi: 10.1503/cmaj.210224

Why was there a string of bright yellow marigolds in the CT scanner?

An hour earlier, sweaty and rumpled from a long, twisting, bumpy taxi ride, I had arrived at the front entrance of the JJ Hospital in Mumbai. As I stood at the entrance, dabbing sweat from my brow and straightening my collar, I gazed up with excitement at the central tower of the hospital's façade. I was about to enter the building where my grandfather had worked almost a century before.

My paternal grandfather, Robert, was born in India in 1885, graduated from Grant Medical College in Mumbai and worked in various positions in India before retiring to England after World War II. I remember his tall, distinguished presence, always clad in an elegant suit. He'd draw a cigarette from a silver case, tap its end as if to call attention, light up, and tell of his life in India decades earlier. As he spoke of mangoes and tiger hunts, his head bobbed and his soft brown eyes widened in response to relived excitement.

I regret not asking him more about his life. My knowledge was restricted to two tattered folders of documents, mostly covering his World War II military service as a medic in Burma. As I was leafing through the folders one day, a faded scrap of blue paper fluttered out. It was a brief typed testimonial to his expertise running the X-ray department at the JJ Hospital in Mumbai, one of India's oldest Western-style hospitals. I have spent my own medical career working with radiation, so I was thrilled to discover this point of connection between us. I kicked myself again for not having asked more questions while he was alive.

In the fall of 2018, I made a long-anticipated pilgrimage to India to retrace my grandfather's footsteps. That tantalizing scrap of paper compelled me to make



Image copyright: iStock.com/Rytis Bernotas. No standalone file use permitted.

a stop at the JJ Hospital, where I had received a warm invitation to visit. After the taxi deposited me at the entrance, I had barely a moment to dry and dewrinkle myself before a welcoming party of smiling staff and students whisked me to the dean's office and presented me with a bouquet and shawl: a symbol of respect. Their enthusiastic welcome immediately put me at ease. The current head of the radiology department, Dr. Shilpa Domkundwar — “ma-am” to her staff — swathed in a beautiful, emerald-green sari trimmed with purple, took me on a tour of her department. As she led me through the corridors, crowded with lines of patients waiting for imaging, she seemed genuinely intrigued by my interest and the connection I brought between the past and the present.

As we toured the X-ray department, I scanned my surroundings for signs of my grandfather's presence. In one corner of a classroom, I spotted a cabinet crammed

with discarded paraphernalia from an earlier era of radiology: dusty old x-ray tubes, meters, and assorted, unfamiliar gadgets. Through the glass door of the cabinet, I saw an old-fashioned hand-held device shaped like a megaphone. From my research into the history of radiology, I recognized it as a fluoroscope, a device used by doctors to look inside the living body long before CTs or magnetic resonance imaging. From its age, I imagined it had once been used by my grandfather. I pictured him holding it against a patient's chest, gazing in wonder and curiosity at an erratically beating heart or faultily expanding lungs.

Our last stop was the CT scanner which, at first glance, was just like any I'd ever seen. A control room with a bank of monitors overlooked the massive doughnut-shaped scanner through a glass partition.

My eyes immediately fell to a bright garland of marigolds lying on the control

room counter, and a tray holding a cluster of small pots, one of which contained rice. The air was rich with a sweet scent from jasmine braided with the yellow flowers. My host indicated these items with a gesture of invitation.

I stepped closer and hesitated. She gestured again. I was flummoxed. What was I supposed to do? Was this some kind of decoration? The passel of students leaned in, all eyes on me. My forehead, only recently dried from the building's air-conditioning, suddenly sprouted new beads of perspiration.

Sensing my unease, my host picked up the garland, handed it to me, and indicated that I should place it on one of the computer monitors. I did so, but overcompensated for my discomfort by laying it as solemnly as a wreath at a cenotaph. The solemn grey face of the monitor suddenly had a necklace of sunshine.

She then pointed to the pot of rice and invited me to sprinkle a few grains on the counter beneath the monitor. Finally, she gently but firmly took my right hand, dipped my fourth finger into a pot of red paste and guided it to the frame of the monitor. She pressed and released, leaving a crimson imprint.

There was a sigh of satisfaction from the students. My host smiled warmly and she bowed in a gentle *namaste*.

Back in her office, where I was offered tea and a platter of bite-sized sweets, I asked her about what had just happened. She hesitated, gave me a bemused smile,

and told me it was difficult to describe in English, but it was a “sort of blessing.”

Over the next few days, the fading red stain on my finger prompted me to research and reflect on my experience. From my reading, I recognized that, yes, I had participated in a form of *puja*, or blessing, at the CT scanner. *Puja* is an important aspect of Hindu spiritual life which, as I had witnessed, can involve elements such as garlands, food offerings and anointings. A Hindu friend confirmed that it's not uncommon to perform *puja* ceremonies on inanimate objects such as newly acquired fridges, computers or cars.

My Western medical mind resisted the idea of blessing a CT scanner. After all, isn't it just a big machine — nothing more than an assembly of sensors, circuits and switches? But my experience had stirred something up. The more I considered it, the more I came around to thinking, “Why not?” Isn't there something about this machine that transcends its physical structure? That invites humility and wonder? It definitely has powers akin to the supernatural: it sees inside the body, it reveals secrets, it can foretell futures. It is a physical manifestation of the boundless ingenuity of humans. Was my host inviting me to consider a spiritual aspect to medical technology?

At the very least, *puja* is an expression of thanks, and part of me was envious that the doctor and her staff were able to pause unashamedly in the middle of a hectic day to express their gratitude to this powerful machine. I was honoured and touched that

they had invited me, a stranger, to participate. In Canada, especially in times of medical crisis such as now, we are overwhelmed by the grind of work and take our medical technology for granted. It's easy to forget that just over a hundred years ago, doctors lacked the capacity to visualize the inside of the body. The discovery of x-rays in 1895 revolutionized medicine and allowed for more accurate diagnoses. Everyone, doctors and patients alike, has benefited from this revolution — currently, the victims of COVID-19 do, too.

I'm glad that blue scrap fluttered from my grandfather's papers. It took me both on a journey of connection with him and to a renewed sense of gratitude for the marvels of modern medicine.

Charles Hayter MD

Toronto, Ont.

This article has been peer reviewed.

Acknowledgements: The author acknowledges the helpful feedback of Rohan Parashuram Kanawade and Karim Ladak on the cultural aspects of this article. He also thanks Dr. Shilpa Domkundwar and her staff and students for their gracious hospitality at the JJ Hospital.

Content licence: This is an Open Access article distributed in accordance with the terms of the Creative Commons Attribution (CC BY-NC-ND 4.0) licence, which permits use, distribution and reproduction in any medium, provided that the original publication is properly cited, the use is noncommercial (i.e., research or educational use), and no modifications or adaptations are made. See: <https://creativecommons.org/licenses/by-nc-nd/4.0/>