Taking Heart: A Reflection on the State of Cardiothoracic Surgery

“A surgeon who tries to suture a heart wound deserves to lose the esteem of his colleagues.”

So pronounced the great surgeon Dr Theodor Billroth in 1883. How wrong he was! He should have confined himself to maladies below the diaphragm.

In the 124 years since those fateful words were uttered, cardiac surgery has seen unprecedented innovation and development. It has gone from suturing wounds of the heart to carrying out other close-heart procedures like PDA ligation, aortic coarctation resection and mitral valvotomy. The discovery of heparin by a lowly medical student and the invention of the heart-lung machine provided us with the key to the heart and all its ills.

Much of the beauty of our craft, for us almost-first-generation cardiac surgeons, lies in the fact that we lived through part of this exciting period of discovery – part of, I say: we were almost there, we almost did that. The luminaries of that era, whom today’s younger surgeons only get to read or hear about, were our personal friends and foes. In my growing-up years, I was fortunate to rub shoulders with the likes of Dwight Harken, Charles Bailey, Helen Taussig, Christiaan Barnard and Norman Shumway. I tracked them down over many a Christmas holiday season to listen to their trials and tribulations.

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in the hope of understanding what made them tick. Against all odds, tick they most certainly did.

Alas, cardiac surgery seems to have ground to a standstill since percutaneous coronary interventions (PCI) came into the picture as mainstream therapy for coronary artery disease, this scourge of modern-day living, a 21st century echo of the biblical plague of bygone days.

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Meanwhile, Percutaneous Transluminal Coronary Angioplasty (PTCA) – once known, when it served its purpose, as POBA, “plain old balloon angioplasty” – gave way to athrectomy catheters and rotablators, then to bare metal stents and now, to the over-touted drug-eluting stents (DES).

With each apparent advance in percutaneous technology, the surgeon was moved further away from the patient: first relegated to the reserves bench to stand by for unexpected eventualities, the surgeon is now expected to participate in what has become a spectator sport.

The state of cardiac surgery is aggravated because, presented with a choice between bypass surgery and PCI, patients will always, no matter what the outcome, opt for the lesser invasive procedure. It cannot be denied that a needle prick in the groin allows the least invasive access.

In the dim light of such dark clouds looming ahead, it would be timely for us, as a community of cardiac surgeons, to reflect on our lot. Should we despair and throw up our arms in surrender? Should we be despondent and resigned to our fate?

I dare say not. If I may: we must take heart. Giving up is not in the character of cardiac surgeons: who we think we can walk on water must not throw in the towel. Ours is a more resilient species than most. If you can lose everything you have staked and start again at your beginnings, Rudyard Kipling wrote, in his inspirational poem “If” – “yours is the Earth and everything in it”. As you read this missive, data is mounting to show the downside of PCI with DES, while regulatory bodies like the FDA are urging us to seriously re-evaluate the various therapeutic options available for coronary artery disease.

This is no time for complacency, however. We must take a moment or two, now that we have so much idle time on our hands, to address our future. Failure to do so could result in our waking up one day only to find that the goalposts have been moved.

Where should we concentrate our boundless intellect and energy? For those of us who have at least a few good years of professional life left, we must face the new dawn. With longer life spans and an ageing population, diseases particular to the elderly are surfacing and will soon reach epidemic proportions. Therein lies our future. A quick assessment of the situation identifies at least four areas in which our attention should be focused: atrial fibrillation, heart valves, aortic maladies and heart failure.

And for those of us involved with teaching, we must take another look at how our younger colleagues are trained. Their curriculum could be expanded to include a stint with an interventionist, perhaps. After all, as the adage goes: If you can’t beat ’em, join ’em!

Jokes aside, when all this unwelcome dust that has been stirred up by the friendly jostling between cardiologists and cardiac surgeons has settled, we will realise that what really drove us and our noble profession to this appalling state of affairs is commercialism. Commercialism, protection of intellectual property and the mad rush to register patents are making us lose sight of our philosophy of “cure sometimes, relieve often, comfort always”.

If we can just stay focused on trying to remember and relive the good old days of altruism, dedication and commitment to our patients’ welfare, we would have set ourselves a task that could keep us all busy for generations to come.