

High-Tech Orthopaedics for ASEAN : A Need for Balance

Orthopaedics has grown with advances in science and technology and both of them have contributed to the improvement of quality of orthopaedic care. High-tech is being incorporated into orthopaedic practice at an alarming rate. The subspecialties in orthopaedics are pushing it even further with scopes, minimally invasive techniques, sophisticated instruments and instrumentation. This push on high-tech though beneficial, has some undesirable effects on the practice and teaching of orthopaedics in ASEAN.

The older generation of orthopaedic surgeons in ASEAN grew with little or no technology and learnt high-tech as they grew older and they know both the methods. But the young surgeons in ASEAN are immersed in high-tech right from the start of their career and are not familiar with the low-tech methods that the senior surgeons applied with success at low cost. The latter are now discarded as obsolete methods. The escalating cost of orthopaedic care from the use of high-tech is passed on to the customer and most of our patients in ASEAN are poor from rural areas and cannot afford it. Eighty percent of diagnosis in orthopaedics can be made by good clinical methods of history-taking and physical examination. This is forgotten in preference to MRI as the first step in diagnosis and we are losing our clinical skills and judgement. High-tech has

also taken away holistic medicine from our practice and the patients are moving towards traditional or alternative medicine.

Teaching and learning of orthopaedics has suffered with the introduction of high-tech, for the orthopaedic residents nowadays moves from one high-tech course to another without learning the biology of orthopaedics. The teaching is not only technology driven but is also commercially driven. Is commercialization bad? It is bad so long as there is no compromise. There is a need for balance. We must learn high-tech orthopaedics, otherwise we will be left behind. We still need low-tech methods to solve our problems cost effectively and the familiarity with them is equally important.

For the 21st century orthopaedic surgeon, orthopaedic education and training must embrace technology, commerce and science as a part of liberal education for public good. We must also be ready for nanotechnology and molecular cell techniques for they would revolutionize the practice of medicine including orthopaedics in the next decade or two. Whatever the scientific and technological advances be, the old and simple methods in diagnosis and treatment of orthopaedic diseases should not be abandoned in favour of high-tech methods which are very costly. A balance between the two is necessary for the teaching and practice of orthopaedics in ASEAN.

P Balasubramaniam