

Anatomical pathology in South Africa: Developments, challenges and opportunities

We tend to be just concerned with our own patch in pathology, whether it be by hospital or region or country. But there is a bigger world out there and I am grateful to Professor Martin Hale for telling us about the practice of anatomical pathology in South Africa. This is the first in a series of articles about pathology in Africa.

Background

The population of South Africa was estimated to be 48,687,000 in the middle of 2008, by Statistics SA, the official source of statistical information for the country (www.statssa.gov.za). Given that South Africa is widely regarded as the economic powerhouse of the African continent, it experiences considerable inflows of migrants, official and unofficial, who are seeking to enjoy the benefits that the country has to offer, with healthcare being no exception. This all adds to the population and diversity of disease.

Funding of healthcare in South Africa is provided by two main mechanisms:

- through health insurance, which allows the patient to receive healthcare in the private setting
- the public health system, which is funded through the National Government.

Private healthcare is enjoyed by approximately seven million of the population, with the balance seeking attention through the public hospital system.

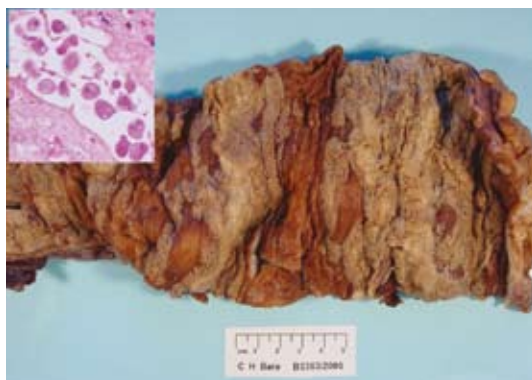
The practice of anatomical pathology in South Africa is likewise divided between the private and public healthcare systems. Approximately 160 specialist anatomical pathologists are registered with the Health Professions Council of South Africa and analysis shows that approximately 50 of them are

employed in the public healthcare system. The remainder, being the majority, work in the private sector. Private practice pathology is in the main controlled by three dominant practice groups, together with a smaller number of small group practices. The private sector group is concerned primarily with patient care and has varying levels of participation in the academic programmes provided by the universities. The disparity in the distribution of pathologists between the public and private sectors, coupled with the bulk of the population (85%) receiving health care through the public sector, results in enormous patient loads being seen by the public-sector pathologists. Expressed another way, there is just over one pathologist per million of the population. Often we in South Africa perceive the rest of Africa to be poorly supplied with pathologists, without realising that these figures are very similar to those for East Africa.

Pathology education and research

South Africa appears to be unique in the world when it comes to the organisation of pathology education at both the undergraduate and postgraduate level, in that the public-sector pathologists are employed by a single entity known as the National Health Laboratory Service (NHLS). This entity is run on commercial lines and operates on a 'fee for service' basis. The NHLS was created by an Act of Parliament in 2000 and was formed with the objective of consolidating pathology services (not only anatomical pathology) that were previously provided by a multitude of different organisations, the main components of which were the previous South African Institute for Medical Research and the universities with health sciences faculties. The objective was to provide cost-effective pathology care to the population of the country. Recognising that there are always pros and cons to such an entity, it can be said that the founding objective is on the way to being met and that from the point

Infectious diseases are commonplace in South Africa; this is a case of fulminant colonic amoebiasis



A patient with advanced histoplasmosis involving the nose and upper airway



of view of anatomical pathology, there is much greater cohesion than existed before. This on its own can only bode well for the future.

The NHLS is closely affiliated to nine universities with a health sciences faculty: University of Cape Town, University of KwaZulu-Natal, University of Limpopo, University of Pretoria, University of Stellenbosch, University of the Free State, University of the Western Cape, University of the Witwatersrand and the Walter Sisulu University. Of these nine, all except the Walter Sisulu University are involved in postgraduate pathology training as well as undergraduate training.

Recognising the uniqueness of the relationship between the universities and the NHLS, coupled with the desire to place academic practice on a firm foundation and protecting the academic environment in a 'fee for service' model, a multilateral 'Umbrella Agreement' was drawn up between the universities and the NHLS. The agreement formalises the relationship between the universities and the NHLS and creates joint staff appointments whereby the professional staff, both consultants and registrars, are made joint appointments between the universities and the NHLS. Staff are paid by the NHLS, but have formalised academic appointments with the universities. Provision is made for the protection of academic time, including research and teaching activities. For academic services rendered, the universities reimburse the NHLS using a simple, but well thought out, financial model that recognises all academic activities.

At the inception of the NHLS, a research trust known as the NHLS Research Trust was created with the sole objective of funding pathology-based research. Over the few years that this has been in existence, the capital within the Trust has grown significantly and has been able to fund increasing sums of money to major and minor research proposals, all of which have been directed at national research priorities. This has resulted in stimulation of research through funding that was previously not available.

The facilities for the practice of pathology in South Africa in both the private and public sectors can be regarded as good overall, although some facilities are in need of a revamp. Funding for capital equipment is generally available and

a full range of investigations is possible, ranging from routine H&Es, immunohistochemistry, electron microscopy to molecular methods.

The country suffers from an acute shortage of skills, with the medical profession being no exception. The NHLS and the universities are fully supportive of postgraduate training and from 2002 to 2008 the number of registrars receiving specialist training in anatomical pathology has almost doubled from 31 to 61. It is hoped that with the passage of time this accelerated training programme will have a beneficial effect on the skills shortage that the country is currently experiencing.

Given the extremely high burden of disease in South Africa, which is amplified by the sub-Saharan HIV epidemic, the practice of pathology in the region is dynamic and stimulating. A day seldom passes without seeing diseases which are only dreamt of elsewhere in the world. One registrar asked in her interview for a post, 'Do you see cases that make you say 'Wow'?', to which our reply was 'Several times a day.' She is still with us and hasn't been disappointed. This provides enormous potential for research activities and training capacity. The combination of disease profile, patient numbers and good facilities is a good foundation for future growth and also acts as an attraction for the training of several supernumerary registrars from countries in Africa other than South Africa. Several such registrars have passed through and continue to pass through the academic departments and it is NHLS policy to accelerate this type of training.

The International Academy of Pathology has formed close academic links with South Africa and the rest of the continent with the provision of academic support, which includes funding of registrars and lecture tours by distinguished visitors. These combined efforts are coming to fruition, as evidenced by the resurgence of academic pathology in East Africa.

Finally, an objective for the improvement of pathology has been set for the continent by the awarding of the international congress of the International Academy of Pathology, to be held in October 2012. The congress has never been held in Africa before and it will provide an academic stimulus that will be felt for years to come. It will afford a wonderful educational experience in a majestic geographic setting, with Table Mountain as the background, and you are all invited to attend – you might even decide to stay.

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