

BY KATHARINA MIEDZINSKA

How to deal with common diseases in Pakistan: the radiologist’s perspective

Each country has its own special healthcare challenges to shoulder. In Pakistan, a densely populated country located in South Asia, with an estimated population of more than 200 million, major healthcare challenges include exceptionally high prevalence rates for certain diseases. During today’s ‘ESR meets Pakistan’ session, some of the country’s top radiologists will discuss the role radiology plays in managing three of the most common ones: oral cancer, chronic hepatitis and tuberculosis.

Many diseases are common in Pakistan, among them endemic and epidemic infectious diseases, emerging infections, and an increasing burden of non-communicable diseases. The actual burden of infections with the hepatitis B and C virus (HBV, HCV) is approximately seven percent, making Pakistan a country with one of the highest prevalence rates for viral hepatitis in the world. Approximately ten million people in Pakistan are infected with

HCV alone. Following the acquisition of the virus, acute HCV infection can progress to chronic infection, which in turn is associated with several morbidities, such as liver cirrhosis and cancer. Besides hepatitis, also malaria, the polio virus (which still circulates in core-reservoirs across Pakistan, although with lesser intensity), dengue outbreaks, and other infectious diseases pose a serious threat to public health security. Over the past few decades, Paki-

stan has suffered a great deal from these and other infectious diseases. Global warming, changing climate conditions, environmental degradation, and other ecological determinants have a direct effect on these diseases and result in the emergence or re-emergence of infectious entities. The causes of such disease outbreaks are complex and often not well understood.

Another big health issue in Pakistan is tuberculosis (TB) – more than 400,000 people are newly infected and about 70,000 die from the disease every year. Globally, Pakistan ranks fifth among the 22 high TB burden countries and has the fourth highest prevalence rate of multidrug-resistant TB.

Issues like these and their management test the already stretched health system on a regular basis and challenge physicians and other health professionals throughout the country, as experts of today’s ‘ESR meets’ session entitled ‘The role of radiology in major healthcare challenges faced by Pakistan’ will show.

“Infections and malignancies are two major health issues in Pakistan. With regard to the first one, although gastroenteritis, pneumonia, typhoid, and malaria are not uncommon, hepatitis and tuberculosis remain the main problems, which is mainly due to their chronic nature, variety of presentations, complications, and lengthy management. When it comes to cancer, among Pakistani women, the incidence of breast cancer is one of the

highest in Asia, while the most common cancer among both women and men is cancer of the lip and oral cavity,” said Prof. Hamid Akram, President of the Radiological Society of Pakistan and chair of today’s session. “Radiology plays a crucial role when dealing with these major diseases, not only in regard to diagnosis and the early detection of complications, but also especially in their management,” he added.

Starting the session off will be Dr. Najam Ud Din, from the Diagnostic Centre in Lahore, who will make imaging of oral cancer the subject of his talk, aiming to familiarise ECR delegates with the spectrum and scale of advanced oral cancer in Pakistan and the variation in imaging and therapeutic practices across the country.

A large proportion of patients presents with stage 3 and stage 4 cancer. Staging, treatment planning, follow-up and surveillance rely on CT/MR and PET/CT. Advanced disease at presentation, poor performance status, limited financial support, and other factors undermine the outcomes of treatment. Approximately 40 percent of these patients die within one year in spite of definite curative treatment, according to Ud Din.

Also in this session, Prof. Dr. Atif Iqbal Rana, from the department of radiology, Shifa International Hospitals, Islamabad, will discuss the role of radiology in developing a living donor liver transplant programme.

“In light of the significantly high prevalence of viral hepatitis in Pakistan, it was imperative to implement an indigenous liver transplantation (LT) programme. At our centre, living donor liver transplant was initiated in 2012, and so far, more than 650 transplants have been performed,” he noted. Rana makes it clear that radiology has been at the forefront in this endeavour: “Our contribution includes preoperative CT-based donor work-up to calculate the liver attenuation index, liver volumetric analysis, and the delineation of vascular anatomy for surgical planning. Also, all patients undergo an MR-cholangiopancreatography. In the post-operative period, both recipient and donor may require imaging to look for complications such as vascular ones or biliary strictures, which are the most common recipient complication in our patients, occurring in about 22 percent of all cases. Our interventional radiologists play an important part in treating these and other complications.”

Ud Din and Rana will be joined by Prof. Dr. Tariq Mahmood, from the department of radiology at the Jinnah Postgraduate Medical Centre, Karachi, who plans to provide an insight into a cyber-knife facility in Pakistan, and Prof. Dr. Ummara Siddique, from the Rehman Medical Institute in Peshawar, who will speak about the different faces of tuberculosis, focusing especially on the variety of radiological findings in tuberculosis, its diagnosis and complications.

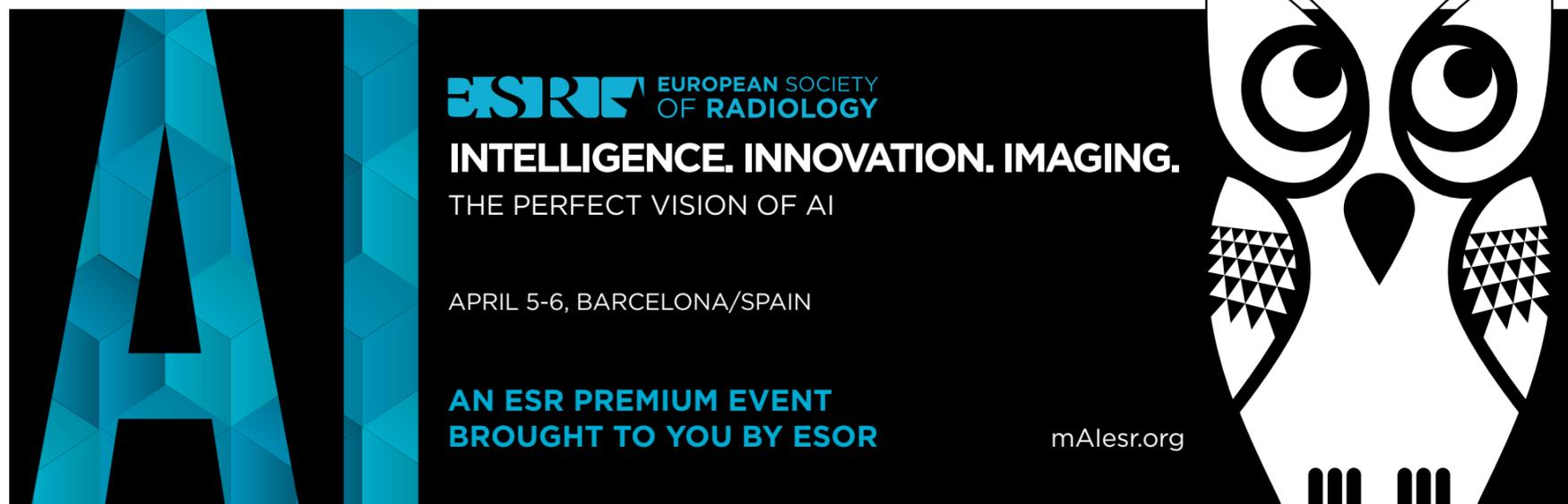
ESR meets Pakistan

Sunday, March 3, 10:30–12:00, Room B

EM 3 The role of radiology in major healthcare challenges faced by Pakistan

Presiding: M.H. Akram; Islamabad/PK
L.E. Derchi; Genoa/IT

- » Introduction
M.H. Akram; Islamabad/PK
- » Imaging of oral cancer
N. Ud Din; Lahore/PK
- » Interlude: Beautiful Pakistan: from sea to sky-high mountains
A. Majeed; Islamabad/PK
- » Role of radiology in developing a living donor liver transplant programme
A.I. Rana; Islamabad/PK
- » Interlude: Philanthropic cyber-knife facility in Pakistan
T. Mahmood; Karachi/PK
- » Many faces of tuberculosis
U. Siddique; Peshawar/PK
- » Panel discussion: Why are oral cancer, chronic hepatitis and tuberculosis more common in Pakistan, and in which scenarios is the role of radiology crucial in the management of these diseases?



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