

Book Review: Tuberculosis

By **E. A. Dosumu MD**. 266 pp.
Impakt Publishing House Abuja, 2006. ISBN: 978 057 012 9.

Tuberculosis, although one of the oldest diseases known to man has remained an important cause of morbidity and mortality even in the 21st century. Several factors have contributed to the resurgence of this disease once thought to be on the verge of elimination. Increasing poverty from global recession, bad management of the economy by leaders in developing countries, population explosion, multidrug resistant tuberculosis and the Human Immunodeficiency Virus (HIV) / Acquired Immunodeficiency Syndrome (AIDS) pandemic, have been identified as some of the factors militating against curbing this growing epidemic.

The burden of tuberculosis (TB) is highest in Sub-Saharan Africa and South East Asia with 95% of TB cases and 98% of TB deaths occurring in developing countries. Over a quarter of a million TB cases may be present in Nigeria.

Despite the huge burden of tuberculosis in Nigeria and other developing countries, there is a dearth of good and standard text books with recent, relevant information on tuberculosis management.

Professor Dosumu, bringing to fore his wide experience in clinical practice, research into tuberculosis and administration, in eleven chapters' leads us through the labyrinth of tuberculosis; helping to bridge this gap.

In the early chapters of the book we are introduced to the disease tuberculosis; its epidemiology and pathogenesis. Immunology of the disease is elucidated as well as the role of genetics in TB transmission. Blacks with HLA type BW15 have a higher incidence of PTB and more advanced disease than Blacks with other genotypes. However no racial predilection for tuberculosis has been found.

There is an extensive discuss on the clinical features of tuberculosis both pulmonary and extra pulmonary in subsequent chapters, with clearly illustrated diagrams where appropriate. Throughout the book, references are cited from local and international studies making it an invaluable research tool for anyone interested in the field of tuberculosis.

The role of HIV in tuberculosis management is well highlighted, with a whole chapter dedicated to HIV infection.

Treatment protocols for patients with tuberculosis as well as Tb/HIV co-infected patients are outlined following both National and international guidelines. The problem of tuberculosis in children is not left out.

The last section of this book is dedicated to the technical guide for sputum examination for tuberculosis in low income countries by the Internal Union against Tuberculosis and Lung Disease (IUATLD).

This brilliantly written book 'Tuberculosis' is a must have for all health personnel: Nurses, Medical students, Resident Doctors, General practitioners, Respiratory physicians and Policy makers at the fore-front of the battle against tuberculosis.

Akanbi Maxwell. MB.BS
Respiratory Unit. Dept. of Medicine,
JUTH, Jos

Multiple Choice Questions In Endocrinology, Diabetes And Metabolism

A. E. Uloko, B.M., B.Ch

Department of Medicine, Aminu Kano Teaching Hospital, Kano.

Answer True (T) or False (T) for questions 1-3.

1. The following increase the output of glucose from the liver?
 - A. Induction of phosphorylase
 - B. Insulin
 - C. Glucagon
 - D. Increased intracellular protein kinase A
 - E. Epinephrine
2. Which of the following will not produce an increase in the plasma level of free fatty acids?
 - A. A drug that increases the level of intracellular cAMP
 - B. A drug that activates α_3 adrenergic receptors
 - C. A drug that inhibits hormone sensitive lipase
 - D. A drug that decreases the metabolic clearance of glucagons
 - E. A drug that inhibits phosphodiesterase
3. Which of the following are incorrectly paired?
 - A. Type 1 diabetes mellitus : antibodies against B cells
 - B. Myasthenia gravis : antibodies against nicotinic acetylcholine receptors
 - C. Multiple sclerosis : antibodies against myelin
 - D. Hashimoto's thyroiditis : antibodies against TSH
 - E. Grave's disease : antibodies that stimulate TSH receptors
4. Laron dwarfism
5. Cretinism
6. Achondroplasia
7. Kaspar Hauser syndrome
8. Which of the following is / are correctly paired?
 - A. Muscle glycogenolysis : epinephrine
 - B. Gluconeogenesis : cortisol
 - C. Free fatty acid mobilization: dehydro-epiandrosterone
 - D. Hepatic glycogenesis : insulin
 - E. Kaliuresis : aldosterone
9. The following is/are characteristic(s) of primary hyperaldosteronism
 - A. Low plasma rennin activity
 - B. Normal plasma ACTH
 - C. High plasma Na^+
 - D. Low plasma K^+
 - E. Hypertension
10. The following hormones are made up of α - and β -subunits
 - A. TSH
 - B. Prolactin
 - C. FSH
 - D. LH
 - E. HCG

In questions 8-10, answer True (T) or False (F).

In questions 4-7, match the condition in each question with the lettered abnormality causing dwarfism that is most closely associated with it. Each lettered item may be used once, more than once, or not at all.

- A. Fibroblast growth factor 3 gene defect
- B. Chronic abuse and neglect

MEDICAL EDUCATION

Clinical Photographic Quiz in Internal Medicine AE Uloko, B.M., B.Ch, MU Sani, FWACP, SM Yusuf, FWACP Department of Medicine Aminu Kano Teaching Hospital, Nigeria.



Fig. 1

1. Fig 1 shows the hand of a 52 year old Nigerian. The pathology affected both hands.

- A. Describe the abnormality
- B. What is the diagnosis?
- C. Mention 5 causes
- D. Which endocrine condition is commonly associated with this?
- E. Briefly describe the pathogenesis of this condition in (D) above.

Fig 2



2. Fig 2 is the chest radiograph of a 38 year old male Nigerian with progressive weight loss, cough and abdominal swelling.

- A. What is the pathology?
- B. What is the likely diagnosis?
- C. What other imaging technique(s) can assist in diagnosis?
- D. Mention three other conditions that can give rise to this abnormality
- E. How else can the patient present?

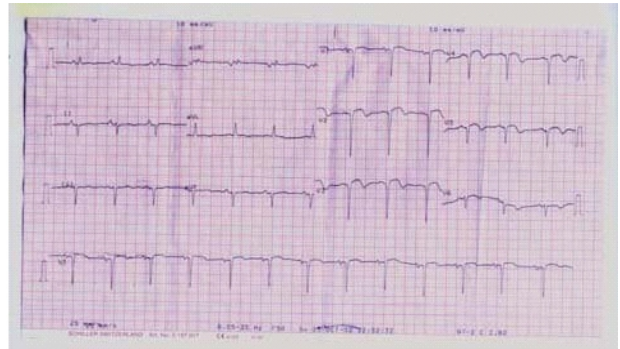
Fig 3



3. Fig 3 is the brain CT of a 63-year old man.

- A. Describe the lesion
- B. What is the diagnosis
- C. How would the patient present
- D. How would you treat

Fig 4



4. Fig 4 is the ECG tracing of a 46 year old man

- A. What are the abnormalities?
- B. What is the diagnosis?
- C. List 5 important risk factors?

Fig 5



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5. Fig 5 shows a 45 year old female admitted in the medical ward.
- Describe this appearance
 - List seven causes

Fig 6



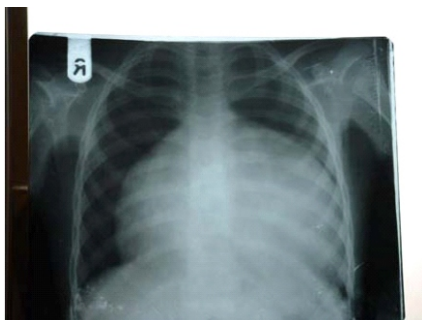
6. Fig 6 is the CXR film of an 80 year old man with chronic cough and oral thrush.
- Describe the abnormalities
 - What additional investigation will aid the diagnosis
 - What is the likely diagnosis?

Fig 7



7. Fig 7 shows the echocardiographic picture of a 27 year old student.
- Describe the abnormality(ies)
 - What is the diagnosis(es)
 - Mention 5 salient physical signs that may be elicited from the patient
 - How would you treat?

Fig. 8



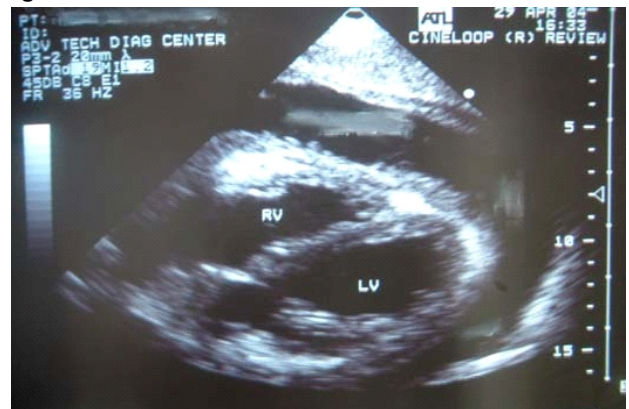
8. Fig 8.
- Describe this CXR
 - Mention 5 causes

Fig 9



9. Fig 9.
- What is the diagnosis?
 - Mention 5 salient physical findings.

Fig 10



10. Fig. 10 is a subcostal echocardiography view of a 25 year old mechanic
- What is the diagnosis?
 - What are the physical findings?
 - List 5 causes

Fig11



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11. Figure 11 is a parasternal long axis trans thoracic echocardiography view of a 10 year old boy.
- What is the diagnosis?
 - How will the patient present?
 - What are the components of the syndrome?

Fig 12



12. Fig. 12 shows a 31 year old housewife presenting with 2 years history of small bumps around the eyes and upper part of the cheeks. The rashes are darker than the surrounding skin, round and not symptomatic. The diagnosis is;
- Trichoepithelioma
 - Trichofolliculoma
 - Seborrhoeic keratoses
 - Seborrhoeic warts
 - Dermatosis papulosa nigra

Fig 13



13. Figure 13 is the picture of a 32 year old mechanic with recurrent eruptions on the chest for 5 years. Examination revealed confluent hypopigmented macules and patches on the trunk, mostly on the upper part. The diagnosis is;
- Pityriasis versicolor
 - Tinea versicolor
 - Eczema
 - Vitiligo
 - Pityriasis rosea

Fig 14



14. Control of the condition in Fig 13 can be achieved with
- Griseofulvin
 - Terbinafine
 - Whitfield ointment
 - Ketoconazole
 - Selenium sulphide



15. Fig 14 shows the picture of a 48 year old woman with progressive skin rashes affecting the side of the scalp and the exposed part of her hands. The rash is associated with mild scaling, skin discoloration and prominent cutaneous vessels. What is the diagnosis?
- Vitiligo
 - Sub-acute cutaneous lupus erythematosus
 - Discoid lupus erythematosus
 - Burns
 - Scleroderma

Answers to Multiple Choice Questions in Endocrinology, Diabetes and Metabolism

	A	B	C	D	E
1.	T	F	T	T	T
2.	F	F	T	F	F
3.	F	F	F	T	F

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4. C
5. D
6. A
7. B

	A	B	C	D	E
8.	T	T	F	T	T
9.	T	T	F	T	T
10.	T	F	T	T	T

Answers to Clinical Photographic Quiz in Internal Medicine

- Thickening of the palmar fascia of the hand with flexion contracture deformity of the middle and little fingers.
 - Dupuytren's contracture
 - Liver cirrhosis, Peyronie's disease, diabetes mellitus, antiepileptic drugs, trauma.
 - Diabetes mellitus
 - Non enzymatic glycation of collagen as a result of chronic hyperglycaemia
- Multiple cannon ball opacities bilateral.
 - Metastatic lung disease from intra-abdominal malignancy probably PLCC
 - Abdominal ultrasonography or CT scan
 - Colorectal cancer, gastric cancer, prostatic cancer
 - With pathological fracture if there is metastasis to bone
- A hyperdense elliptical lesion of the right cerebral hemisphere compressing the right lateral ventricle with midline shift
 - Right epidural haematoma
 - Dilated pupil on the right, hemiparesis / hemiplegia on the left, headache, Photophobia, vomiting, confusion and altered consciousness.
 - Craniotomy and evacuation of the haematoma
- Left axis deviation, left atrial enlargement, ST elevation V1-V5, QS waves V1-V5.
 - Anterolateral Myocardial Infarction
 - Hypertension, DM, Cigarette smoking, Dyslipidaemia, Obesity
- Egg-on-stick appearance
 - Liver cirrhosis, abdominal TB, endomyocardial fibrosis, intra-abdominal malignancy, Meig's syndrome, Cushing's syndrome.
- Non-homogenous opacities involving the right mid zone, left mid and lower zones with hyper-inflation of the right lung field.
 - HIV test
 - Pulmonary tuberculosis with HIV/AIDS
- Giant left atrium with doming of the anterior mitral leaflet
 - Mitral stenosis
 - Irregularly irregular pulse of atrial fibrillation, small volume pulse, tapping apex beat, apical mid diastolic murmur, loud first heart sound with an opening snap.
 - Treat heart failure and atrial fibrillation if present. Surgery / valve replacement.
- Aglobular heart
 - Pericardial Effusion. Dilated cardiomyopathy EMF Arrhythmogenic right ventricular cardiomyopathy (ARVC) Ebstein anomaly
- Rheumatic mitral regurgitation
 - Displaced heaving apex beat Apical PSM radiating to the axilla Third Heart Sound AF may be present
- Pericardial effusion.
 - Small volume tachycardia, decrease pulse pressure, raised JVP with Kussmaul's sign, non palpable apex, distant heart sounds, pericardial knock.
 - Tuberculosis, Uraemia, Connective tissue disease, Malignancy, Hypothyroidism, surgery, Myocardial infarction, Coxsackie, EBV, Echo viruses,
- Tetralogy of Fallot
 - Dyspnoea on exertion, Squatting, Palpitations, Congestive heart failure
 - Ventricular septal defect, overriding aorta, right ventricular hypertrophy, pulmonary stenosis.

	A	B	C	D	E
12.	F	F	T	T	T
13.	T	T	F	F	F
14.	F	F	T	T	T
15.	F	F	T	F	F