# OSCE Volume II



#### **AUTHORS AND THEIR DEDICATIONS**



#### Prof. Dr. SM Tuli

Dedicated to my parents Shanti Tuli and Ram Lal Tuli, my Parents; my teachers Prof. K.S Grewal, Prof P. K Duraiswamiand Prof. Balu Sankaran my teachers; and large number of my stimulating students, and my ungrudging patients, who provided me the opportunities to study and enjoy the science and art of Medicine.



#### Prof. Dr. Sudhir Kumar

Dedicated to my students and patients.



#### Prof. Dr. Anil Dhal

Dedicated to 'The art of clinical examination from the masters of yesterday to the torchbearers of tomorrow.' The lines on coverpage "Established, Current & Emerging Concepts of Spine" are thoughtfully written by Prof. Dr. Anil Dhal.



#### **Prof. Dr. Shantharam Shetty**

I dedicated this work to thousands of my patients, my teachers and my students who have made it possible for me to be what I am today.



#### Prof. Dr. VB Bhasin

This book is dedicated to all who want to master Orthopedics.



#### Prof. Dr. Gopa Kumar

I dedicate my work in conceptul orthopedics to my wife and children



#### Dr. Ravinder Dimri

I dedicate this book to all those young minds who keep asking me "Why?" and "How?" which encourages me to read and learn new things.



#### Dr. Shekhar agarwal

I dedicate my work in conceptul orthopedics to my family and patients.



#### Padma Shree Prof. Dr. Mayil Natarajan

I humbly dedicate this book to my parents Prof. Natrajan and Dr. Janaki.



#### Dr. Ajith Kumar

Humbly dedicated to my parents, Mr. Chandrashekar Shetty and Mrs. Malathi Shetty, my teachers Prof. A.Srinivasa Rao, Prof. Verghese Chacko, Prof. Shantharam Shetty, Prof. Bhaskaranand Kumar, Prof. Benjamin Joseph, Prof. SP Mohanty, Prof. Sripathi Rao, my innumerable colleagues, my loving family and in particular Team Tejasvini and my patients and residents each of whom in their own way kindled the fire and kept me going.



#### Prof. Dr. Heiko Graichen

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#### Dr. Ram Chaddha

Dedicated to all my beloved patients who taught me: truth and transparency build trust in treatment.



#### Prof. Dr. Shubhranshu Shekhar Mohanty

Dedicated to my First teacher in Orthopaedics, Prof. P.T. Rao, who influenced me to pursue this branch of medicine.



#### Dr. Harpreet Singh

I would like to thank my family, my wife and my kids for their constant support. I would like to dedicate this work to my teachers, my seniors and my students who inspired me to become a better teacher and a better human being.



#### Dr. Ashish Taneja

Dedicated to my beloved mother, my sincere father, my loving & caring wife and my two lifelines (my kids).



#### Dr. Shailesh Pai

This work is dedicated to The Almighty, my parents and my mentors for their constant blessings. To my wife for the support and encouragement and my kids for awakening the child in me. Last but not the least to the Team Conceptual Orthopedics for being a source of inspiration.



#### Dr. Vivek Verma

I dedicate this to my teachers who made me what I am today.



#### Dr. Mohammed Faheem Kotekar

Dedicated to my Dad.



#### Dr. Maninder Singh Shah

Dedicated to my parents, wife and children whose support and love has been my pillar of strength.



#### Dr. Sunii Gurpur Kinni

I dedicate this book to my family, teachers and patients.



#### Dr. Mrinal Sharma

I dedicate this book to my wife Dr. Shalini Sharma.



#### Dr. Anuj Jain

I dedicate this book to my teachers and my family.



#### Dr. Vishal Huggi

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#### Dr. Jitesh Manghwani

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#### Dr. Yogesh Gowda

Dedicated to my teachers who mentored me, all the patients who trusted me, all the peers whom I deeply respect, all the friends who stood by me & all the people who inspired me.



#### Dr. Zeeshan Muzahid T

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#### Dr. Suvrat Arya.

Dedicated to my parents, Dr. Sushma Arya and Mr. Vijay Bhushan Arya and my wife Dr. Shruti Jain.



#### Dr. Abhinav Jogani

I would like to humbly dedicate this book to God almighty, parents & wife, teachers, and my alma mater 5eth G5 Medical College and KEM Hospital, Mumbal.



#### **Dr. Naufal Nahas**

I would like to dedicate this book to my brother Nabeel Nahas who taught me that one should 'Learn, Listen and Seek' only what he loves and has passion for.



#### **Dr. Piyush Godegone**

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#### **Dr. Rohit Prasad**

Dedicated to my parents for their persistent motivation, to my wife for laying the foundation of good things in my life and to the readers who constantly inspire us to perform better.



#### Dr. Shekhar Srivastav

I dedicate my work to my Teachers, Dr. Shekhar Agarwal, My Patients and Most importantly My Family.



#### Dr. Raju Easwaran

I would like to dedicate this book to Dr Matthew Varghese from whom I've learnt so much with orthopaedics being a small portion of the vast knowledge he has imparted & continues to do so selflessly.



#### Dr. Amite Pankaj Agarwal

I dedicate my work to my patients.



#### Dr. Ankit Khurana

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#### **Dr. Nishant Gupta**

I dedicate the book to my teachers, my parents, wife and my daughter Avnisha Gupta.



#### Dr. Laxmi Narayan Jajoriya

I dedicate my work to Parents, Teachers and Patients



#### Dr. Aditya Verma

In gratitude for their unwavering support and endless encouragement, this book is dedicated to my parents, grandparents and brother, whose love has illuminated every page of my life.



#### Dr. Apurv Mehra

I dedicate this book to my daughter, Vrinda Mehra, my patients, & my students who have helped me evolve as a surgeon & a teacher.



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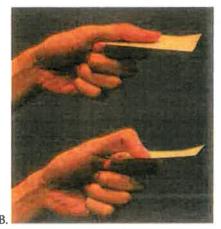
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## CHAPTER 8.1

## OSCE Paper -6

#### **STATION 1**





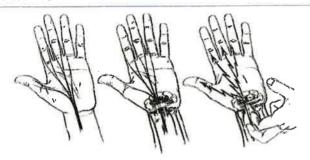
- 1. What is the sign showed in images A and B?
- 2. Which nerve will be damaged?



- 1. What are tests shown in images?
- 2. How are the tests done?

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#### **STATION 3**



- 1. What is the sign shown in the picture?
- 2. What is the test shown and how is it done?
- 3. What is the inference of this sign?

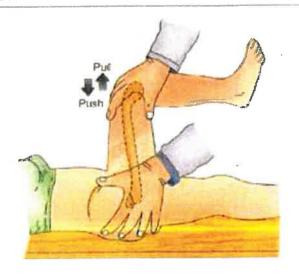
#### **STATION 4**





- 1. What is the sign shown in the picture?
- 2. What is the pathology behind it?
- 3. Which conditions can cause it?

#### **STATION 5**



- 1. What is the test done in the picture?
- 2. How to do the test?
- 3. Where will you get the positive test?

#### **STATION 6**



- I. What is the sign shown?
- 2. What is the cause of this sign?
- 3. What are the four cardinal symptoms of this sign?
- 4. What is the treatment?



- 1. What is the test shown in the picture?
- 2. How is the test done?
- 3. What are the conditions in which this test is done?
- 4. What is the modification of this test?

#### STATION 8



- 1. What is the diagnosis?
- 2. What are the associated conditions?
- 3. What are the clinical findings?
- 4. What is the treatment?

#### **STATION 9**

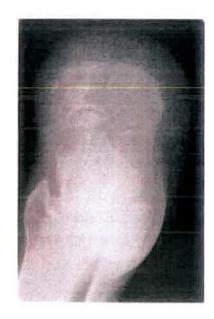
A 10-year-old boy complains of fever and pain in lower part of thigh for 5 days. He has been unable to bear weight on the leg since then. There is no history of trauma. On physical exam there is presence of local tenderness over the distal femur. His ESR is 68 mm/hr (normal <15) and CRP is 14 mg/Dl (normal <1). His temperature is currently 101.2 degrees F. He has been managed with appropriate IV antibiotic therapy for three days, but he has failed to show any clinical improvement.

- 1. Diagnosis.
- 2. Next appropriate step of management.
- 3. What investigation is the most expeditious method to determine the early success of treatment?

#### **STATION 10**

A 20-year-old female suffers a road traffic accident and as a result a crush injury to her foot. The surgeon does an amputation due to the neurovascular status of the limb. The amputation done is shown in the figures below.





- 1. Name the amputation seen in the above case scenario
- 2. What is the common deformity seen in post operative follow up of such patients?
- 3. What is the cause of such a deformity?
- 4. Mention the surgical techniques described to prevent such a deformity



- 1. Enumerate 2 possible reasons for the failure of this fixation?
- 2. How will you treat this condition?
- 3. What biological method will you perform?

#### **STATION 12**

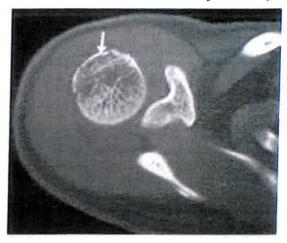
This 13-year-old girl was complaining of pain over back



- 1. What are the findings?
- 2. What are possible associated problems with this you want to rule out?

#### **STATION 13**

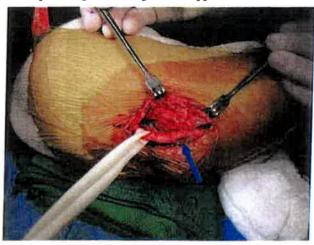




- 1. What is the diagnosis?
- 2. What will be the clinical presentation?
- 3. What are the treatment options available?

#### **STATION 14**

Intra operative picture of a posterior approach to the elbow:



- 1. What is the structure tagged?
- 2. Name the test you want to do post operatively to check for iatrogenic injury?

#### OSCE

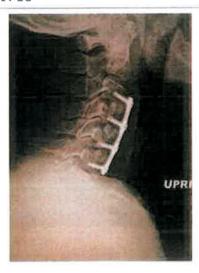
#### STATION 15

A 33-year-old man came with a swelling of right elbow without much pain.



- 1. What is the possible diagnosis?
- 2. What is the possible cause of this painless swelling?
- 3. What is the region of possible primary lesion?
- 4. Name the lesion?

#### **STATION 16**



- 1. What are the precautions for applying the screws as to the direction of screws?
- 2. What is the structure at risk?
- screw purchase required uni-cortical or bi-cortical and why?

#### STATION 17

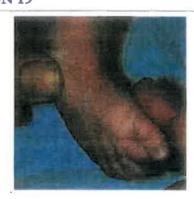


- 1. What are the views in this x-ray?
- 2. What is your diagnosis

#### **STATION 18**



- 1. What is this injury?
- 2. How will you treat this condition?
- 3. Classification?



- 1. What is being done?
- 2. Diagnosis?
- 3. Surgical management protocol?

## **CHAPTER 8.2**

### **OSCE Paper -6**

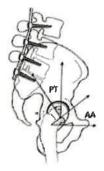
#### STATION 1

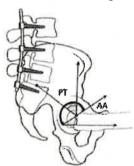


- 1. Name the fracture in both x rays
- 2. Classification.
- 3. Implant used and fixation mode in each.

#### **STATION 2**

48 years male patient is planned for THR, and patient has undergone spine surgery, and it is unbalanced in sagittal plane.





- 1. What are the parameters you would like to include in your pre-op templating for THR?
- 2. How will you decide the anteversion of the cup?

#### **STATION 3**

12-year-old boy presented with swelling and pain in lower leg. Patient does not have any constitutional symptoms:



- 1. What is the possible diagnosis you can tell?
- 2. How to suspect this tumour clinically?
- 3. Elaborate the X-rays findings?
- 4. Next investigation of choice?
- 5. Staging and treatment options?

#### OSCE

#### STATION 4

#### 22-year-old male:



- 1. Radio logical findings?
- 2. Diagnosis?
- 3. Levels of calcium and alkaline phosphate levels?
- 4. What are the other problem?

#### **STATION 5**

This is an x ray of 20-year-old female:



- 1. Diagnosis
- 2. Reduction manoeuvres intraoperative?
- 3. How would you like to manage?

#### **STATION 6**



- 1. Diagnosis
- 2. Classification system?
- 3. How will you manage?

#### STATION 7

This 40-year-old man had pain and swelling of his left knee. This is the clinical finding and x ray:





- 1. What are the deformities?
- 2. Probable diagnosis and differentials?
- 3. Further investigation needed?

#### **STATION 8**

Patient underwent surgery of thigh 2 years back. Now presents with discharging sinus from lower thigh.



- 1. Diagnosis?
- 2. Classification?
- 3. Cause of persistent sinus?

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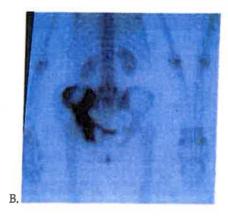
#### 1. What condition should be considered?

- 2. Pathophysiology of this condition?
- 3. Radiological grading.
- 4. How will you manage this patient?

#### **STATION 11**

A 65-year-old man presented with unexplained progressive right hip pain and elevated alkaline phosphatase level.





- 1. What is your diagnosis in image A?
- 2. Identify the investigation done in image B?
- 3. Pathophysiology of this condition?
- 4. Management of this condition?

#### **STATION 12**



1. Enumerate the radiological findings.

#### **STATION 9**





- 1. Identify the deformity?
- 2. Enumerate two causes for this deformity.
- 3. Other radiological findings.
- 4. Management of this condition.

#### **STATION 10**

A patient reports experiencing recurrent episodes of intense joint pain, typically starting in the middle of the night. The pain is often described as throbbing and is accompanied by swelling and redness.

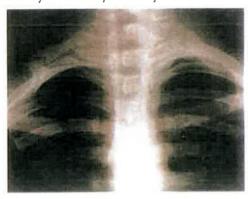


#### OSCE

- 2. What will be your diagnosis?
- 3. What will be your investigations?
- 4. Management of this condition?

#### **STATION 13**

A 30-year-old college lecturer presents to your outpatient with complains of tingling and numbness in his fingers of right hand. The numbness affects mainly the ring and little finger and gets worse with overhead activity. His neurologic exam is normal. Both electromyography and nerve conduction studies don't show any abnormality. His x-ray is shown below.



- 1. What is the most likely clinical diagnosis?
- 2. Mention 4 etiological causes for the same.
- 3. Enumerate 4 provocative tests for confirmation of the above condition.

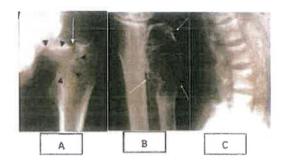
#### **STATION 14**



- 1. Identify the apparatus?
- 2. Rate of increase in movement?
- 3. Indications and Contra-indications?

#### **STATION 15**

A 40-year-old patient with chronic renal disease presents with the below given x rays:



- 1. Mention the diagnosis
- 2. Identify the marked x ray signs
- 3. Pathophysiology
- 4. Clinical features

#### **STATION 16**

A deep-sea diver presented to OPD with complaints of pain in left groin with antalgic gait.



- 1. What is the probable diagnosis?
- 2. Describe the etiology.
- 3. Which classification system would you use?
- 4. Describe the treatment options



- 1. Which class of drug does the shown medicine belong to?
- 2. Indications of use
- 3. Mechanism of action
- 4. Dosage

#### **STATION 18**



- 1. Identify the condition
- 2. Describe any two radiological signs associated with this condition?
- 3. How will you manage this patient?

#### **STATION 19**



- 1. Identify the condition?
- 2. What are the radiological findings?
- 3. Treatment modalities?



- 1. Identify the view
- 2. Position of the limb?
- 3. Indications?