POSTGRADUATE INSTITUTE OF MEDICINE
UNIVERSITY OF COLOMBO

MD (CLINICAL ONCOLOGY) PART II EXAMINATION
OCTOBER/NOVEMBER 2021

Date:- 27th October 2021 **Time:-** 2.00 p.m. - 4.00 p.m.

PAPER I

Answer all four (04) questions.
Answer each question in a separate book.
Please write legibly.

1. A 46-year-old married man who presented to his family doctor with a small neck mass, was initially treated with a course of antibiotics. He had never smoked or consumed alcohol. As the neck mass further increased in size, he underwent FNAC of his neck mass at a surgical clinic. This revealed a non keratinizing squamous cell carcinoma. He then deferred further tests.

   When his neck mass continued to increase in size, he returned to the surgical clinic. CT scan of head and neck revealed an enlarged right tonsil with right tongue base involvement. Multiple cystic enlarged lymph nodes in the right cervical chain, largest measuring 6 cm x 7 cm in size with central necrotic area were also noted.

   He himself presented to your oncology clinic for further care.

   1.1. State the possible causes for his disease, with reasons. (10 marks)

   1.2. What further investigations would you do before commencing any definitive treatment? (15 marks)

   1.3. If no distant metastasis are noted and you are planning definitive radiotherapy,

      1.3.1. describe your radiotherapy plan in detail. (20 marks)

      1.3.2. what radio-sensitizer would you select? Give reasons. (15 marks)

Contd…../2-

1.4. After 15 fractions of radiotherapy, he became positive for Covid-19 with cough and fever. (Rapid Antigen Test - Positive and PCR - Positive with CT value of 14).

What further actions would you consider? (10 marks)

1.5. After 10 days he became stable and his O_2 saturation was 98% on air. What steps would you take to recommence radiotherapy? (15 marks)

1.6. What would be your follow up plan for both his Covid-19 infection and cancer? (15 marks)

2. A 36-year-old man presented with right hypochondrial discomfort. His performance status was ECOG-0. He did not have any significant past medical or family history.

Alpha feto protein (AFP) - 1000 ng/ml
INR - 1.4
Child-Pugh score - A

Triphasic CT scan revealed a 4.5cm solitary liver tumour with arterial enhancement, which was isodense with liver parenchyma, in the portal venous and delayed phases.

2.1. List five (05) risk factors for the development of hepatocellular carcinoma (HCC). (15 marks)

2.2. When discussing the treatment options with the patient, what factors would you consider? (20 marks)

2.3. How would you respond to a question at the multidisciplinary meeting regarding the need for a percutaneous biopsy to confirm the diagnosis? (15 marks)

2.4. Describe the possible local treatment options which are potentially curable for this patient. (30 marks)

2.5. However after discussion, he decided to go for trans-arterial chemo-embolization (TACE), which was repeated once. One year later, CT scan revealed multiple enhancing hepatic lesions with portal invasion. His performance status was still ECOG-1. His liver function remained normal and he refused any further invasive procedures.

Describe the treatment options available now. (20 marks)

Contd…../3-

3. A 60-year-old man presented with dyspeptic symptoms for two years, associated with on and off fever with a recent episode of melena. One year ago, the Gastroenterologist suggested excluding *Helicobacter pylori* infection. Unfortunately, he refused and continued to use medicine given by his General Practitioner.

Later on however, he was treated with *Helicobacter pylori* eradication regimen. Six months after the treatment, his symptoms re-appeared and ultrasound scan revealed a small gastric mass and enlarged peri-gastric lymph nodes.

3.1. What further investigations would help to make a definitive diagnosis? (20 marks)

3.2. He was diagnosed to have mucosal associated lymphoid tissue (MALT) lymphoma and a decision was made to treat him with radiotherapy.

3.2.1. Indicate what your treatment volumes and fields arrangements would be? (25 marks)

3.2.2. Which dose/fractionation schedule would you prescribe? (10 marks)

3.3. When obtaining informed consent for radiotherapy, what toxicities would you mention? (10 marks)

3.4. Four weeks after radiotherapy, he presented with loss of appetite and moderately elevated liver enzymes.

How would you manage him? (15 marks)

3.5. Two years after completion of radiotherapy, he presented with epigastric pain and vomiting. Upper gastrointestinal endoscopy (UGIE) and biopsy revealed recurrence of MALT lymphoma.

Briefly describe your management. (20 marks)

Contd...../4-

4.

4.1. A 56-year-old previously healthy woman who had a 4-week history of mild malaise and progressive backache, presented with paraparesis of 24 hours duration. An urgent magnetic resonance scan of the spine (Figure:1) revealed a destructive lesion in the T11 vertebral body.

Figure 1

4.1.1. Mention the five (05) most likely underlying malignancies that would cause this condition. (15 marks)

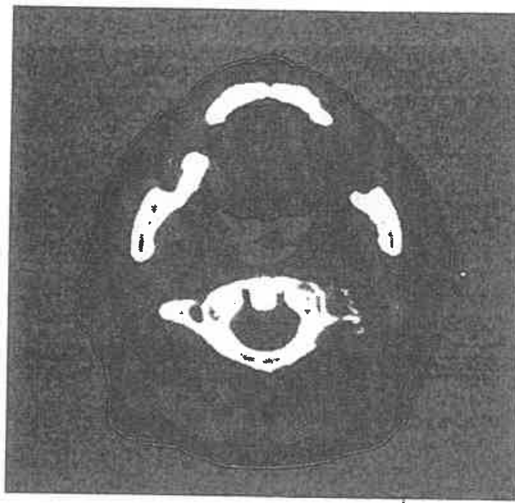
4.1.2. How would you manage this patient, if the lesion in the T11 was a metastatic deposit? (20 marks)

Contd…./5-

4.2. A 65-year-old patient previously treated for adenocarcinoma of lung, presented with one episode of seizures, headache, nausea and vomiting. MRI brain revealed a 3.2 cm solitary lesion in the left frontal lobe. No active disease was found elsewhere. His performance status was ECOG-1.

4.2.1. How would you manage this patient? (25 marks)

After 7 months he presented with a painful metastatic lesion in the left transverse process of C1/Atlas. He had moderate to severe neuropathic pain compromising his quality of life. A decision was made to treat him with urgent palliative radiotherapy.



CT Scan - axial view

4.2.2. Draw the radiotherapy fields in the annexure given in a separate page. (10 marks)

4.2.3. What dose/fractionation would you use for this patient? (10 marks)

4.2.4. Give reasons for your above field arrangement in 4.2.2. and the dose/fractionation in 4.2.3. (20 marks)