**Mid-Term Assignment (Spring-20) (DPT 6TH Semester)**

**Course Title: Pathology and Microbiology-ll Instructor: Dr. Maria Feroze**

**Time: 48 hours Max Marks: 30**

**Note:**

* **You can use Google/ Google Scholar as a source of help but refrain from copy pasting the data directly from these sources.**
* **More than 25% plagiarism in your answer will not be acceptable.**
* **Attempt all questions from this section, all questions carry equal marks.**

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Q1. A 16 years old male patient from Bannu presented with complaints of severe pain along the course of sciatic nerve from last 3 days. O/E, he is afebrile and is having rash on his back extending to his legs. There is no travel history abroad. Other examination is unremarkable.

1. What is the diagnosis and causative agent?

**Diagnosis**

**Herpes zoster ,AKA shingles** which is a viral infection caused by by reactivation of varicella zoster virus .herpes zoster occur when dormant chicken pox virus reactivate .

1. What are the other signs and symptoms of this disease?

**Signs And Symptoms**

The sign and symptoms of herpes zoster include headache ,tingling , fever , chill,appearance of the rashes on body ,fluid filled blistering red rashes .

1. What are the risk factors of this disease?

**Risk Factor .**

The most commonly known risk factor for the herpes zoster is immune suppression ,radiation ,infection ,physical trauma and diabetes mellitus .

1. Write the management and prevention of this disease.

**Management**

* NCS ( nerve conduction study )
* EMG (electromayograph ) to the lower limb
* Intrathetical steroid
* Analgesics
* Spinal cord stimulation
* Antiviral drugs

**Prevention**

* Avoid direct contact with normal one
* Don’t use patient objects like razor ,brush towel etc
* Vaccine for virus like polio
* Build immunity against the virus

Q2. A 25 years old female after an electric burn is brought to the hospital involving 42% percent of her body. O/E, her skin color ranges from blackish to white having brown tinges. The patient is pain free and there are no visible vessels.

1. What degree of burn is this patient suffering from?

**3rd degree of burn**

1. What is the etiology and pathophysiology of burns?

**Etiology and pathophysiology**

The etiology of the burn is a high electric voltage .

3rd degree burn is a thickest burn in which both the dermis and epidermis are destroyed even hypodermis .the patient is pain free because the pain receptors of the patient is also destroyed. Depending on the cause 3rd degree burns cause the skin to look dark brown, raised and lathery, waxy and white.

1. Write a note on the assessment of burns?

**Assessment of burns**

The assessment of patient involve objective examination, depth and area of the burn ,fluid and blood lost ,wound ,blood vessels damaged heart rate. The assessment of burn also involved rules of nine.

1. What are the common causes of deaths in burn patients?

The common causes of death in burn patient is circulatory system failure ,cardiac failure ,suffocation ,inhalation of toxic gasses ,dehydration and brain failure . In short the common cause of death in burn is multi organ failure.

Q3. A 46 years old laborer presented to you with a blackish scar on his shin from last 2 months. According to him, the scar is increasing in size very aggressively. O/E, it is non-tender with normal temperature and he is diagnosed as a case of malignant melanoma.

1. How can u tell the difference between malignant melanoma and other forms of skin cancer?

**Malignant Melanoma**

Malignant melanoma is Aka melanoma the type of cancer that can comes from the pigment producing cells called melanocytes.it commonly occur on skin but rarely occur in the intestine, mouth or eyes .mouth commonly occur in women. It is generally alteration in moles which involves skin breakdown irregular edges increase in size .Diagnostic test for malignant melanoma is biopsy. Treatment for the malignant melanoma is depends , chemotherapy and surgical removal of the surrounding area is the treatment of malignant melanoma.

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| Types of skin cancer  | Description  | Severity  | Appearance  |
| Melanoma  | Develop in the skin cell (melanocytes) | Most severe type AKA deadly skin cancer. | A number of colors asymmetrical and large size  |
| Squamous cell carcinoma  | As the name indicate squamous developed in squamous cell  | More severe than other type basal cell cancer  | It is look like warts scaly patches and pen sores . |
| Basal cell carcinoma  | Developed in the basal cell of the skin epidermis  | Less severe  | Nonlethal ,open sores and small pink development  |

1. What is the prognosis of this disease and also write the work-up plan?

**Prognostic factor**

The prognostic factor include .

* Ulceration
* Mitotic rate is inversely proportional to prognosis even 1/sq Mm cut off is consider
* Tumor thickness if the thickness is higher the stage is upgrade .
* Another one is angiolymphatic invasion
* Satellitism is also poor prognostic factor
* And unresolved factor involve local recurrence and positive deep margin for biopsy .
* Age
* Gender

**Treatment and prognosis**

* Chemotherapy
* Radiation
* Surgery

**Target treatment**

* MEK inhibitor (it is a drug or chemical that inhibits the protein mitogen )
* Vemurafenib (BRAF inhibitor )

**Immune therapy**

* Pembrolizumab and nivalomab
* Interferon
* Lpilimumab

**Work plan**

* Avoid occupational sun exposure
* Work out arobic atmosphere
* Maintained low body temperature
* Work for limited time
* Do not work up to exhaustion .