An Interesting Case of Quadriparesis

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History

- A 30 year old female came with chief complaints
- Weakness both lower limbs- 5mths
- Difficulty in neck holding- 5 mths
- Weaknes of both upper limbs- 3 mths
- weakness was mainly proximal. Had difficulty in getting up in bed
- Insidious onset and progressive

- No history suggestive of of sensory symptoms, bowel and bladder involvement, cranial nerve involvement , involuntary movements

- She gave history of weight loss of 5 to 6 kgs in 5 months she also noticed a painless swelling in left lower abdomen, insidious in onset, gradually increasing in size and a lump in left breast.

- No history of vaginal bleeding or discharge.

- No h/o skin rash, joint pains, ulcers
- No significant past or family history
- Obstetrics History -G2 P0 L0 A2
- Menstrual history- normal
- Impression – gradually progressive quadriparesis with truncal weakness and abdominal mass under evaluation.

On examination

General examination:

No skin rash or lesions.No pallor,icterus,cyanosis,clubbing and lymphadenopathy.

Temperature, pulse ,respiratory rate and BP normal.

Systemic examination:

- Per abdomen examination

  left iliac region swelling,

  a 10*5cm mass

  well defined margins, surface smooth, hard ,not moving with respiration, no local rise of temperature,fixed, no bruit.

- Breast examination-
  left breast lump,
  3*2 cm,
  well defined margins, smooth surface,
  no local rise of temperature,
  non tender, soft in consistency, freely movable.

- CNS-Normal higher functions and cranial nerves
- Motor:
- Weakness of neck extension
- Truncal weakness
- hypotonia in all limbs, Power in all the limbs
- proximally was grade 1, distally power was 4
- Deep tendon reflexes were diminished in all limbs.
- Planters were flexors.

- Sensory system- Normal
- No signs of meningial irritation
- Other Systems
- Cardiovasular and Respiratory system – Normal.

- Clinical diagnosis- Polymyositis with abdominal mass? Malignancy
- Cause- ?Paraneoplastic

INVESTIGATIONS

CBC,LFT,RFT-NORMAL

SEROLOGY-HIV, HbSAg & Anti HCV Negative

CSF-NORMAL

ESR-60mm/hr(0-29mm/hr)

CA125-1589u/ml(0-35)

CPK NAC-609IU/L(38-176)

AFP-1.85IU/ml(0.5-5.5)

CEA-3.3ng/ml(<0.5)

BETA HCG-1.2MIU/ML(<10)

ANA BLOT-NEGATIVE

IMAGING

- **USG ABDO PELVIS-**

S/O-b/l cystic ovaries with increased vascularity ? Neoplastic lesion.

- **USG BREAST-** s/o left fibroadenoma

- **CECT ABDO PELVIS PLAIN AND CONTRAST:**

S/O metastatic ca ovary with L3 vertebral metastasis,4 to 10 ribs metastasis.

- **MRI ABDO PELVIS:**

left haemorrhagic ovarian cyst with small haemtosalpinx. Right side tubular cyst s/o-hydro/hematosalpinx.

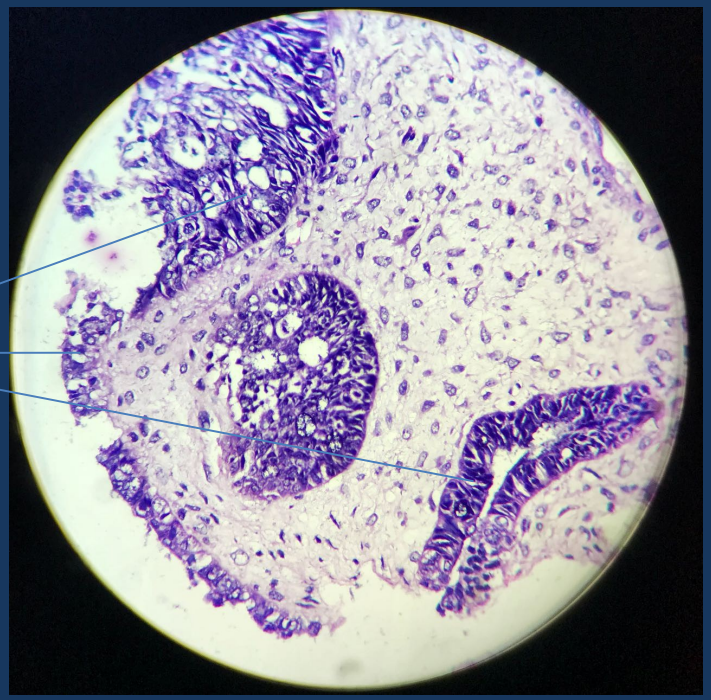
- **MRI L-S SPINE-** S/O diffuse hyperintensity in all visualised skeletal muscles indicating inflammatory edema.

Neuro-electrophysiology

- **NCV -** Normal
- **EMG-** increased insertional activity
- increased spontaneous acivity
- low motor unit actional potentials
- S/O- inflammatory muscle disease.

Biopsy

- CT Guided Left Ovarian Mass Biopsy – S/O Mucinous Cystadenocarcinoma.



- Muscle Biopsy Of Left Vastus Lateralis was S/O- Myositis.

TREATMENT DURING HOSPITALISATION

- Physiotherapy
- Tab prednisolone 50 mg od.
- Tab azathioprine 50 mg od.
- Was referred to gynecologist and oncophysician

Discussion

- **Causes of inflammatory muscle disorders**
- Primary polymyositis
- Dermatomyositis
- Polymyositis assoctaed with malignancy
- Polymyositis assoctaed with connective tissue disorder
- Inclusion body myositis
- Idiopathic.

- The hallmark of these disorders is muscle weakness.specially proximal and truncal weakness , neck muscle weakness.
- DM and PM are associated with malignancies only in a minority of cases.
- The risk appears to be higher in women.
- The most common tumors are cancer of the breast, lung, ovary, stomach, and non-Hodgkin lymphoma..

- PATHOPHYSIOLOGY-Antigens targeted for an immune response are expressed both in the inciting tumor and the affected neuronal tissue.

  Histidyl t-RNA synthetase- as an epitope

- INCIDENCE OF MALIGNANCY:
- The onset of dermatomyositis–polymyositis usually precedes evidence of carcinoma,ranging from 3 months to 6 years, with a mean of 2 years.

- TREATMENT:
- Removal of tumour and immunusuppresion with steroids.

Take home message

- The investigation of inflammatory myopathy patients for underlying malignancy should be guided by three principles:
- Findings obtained by a thorough medical history, physical examination, and laboratory testing are often essential in making the diagnosis of cancer.
- Age-appropriate cancer screening tests are a valuable part of the work-up of a patient with DM or PM.
- Limited additional testing, such as CT scans of the chest, abdomen, and pelvis, is recommended for patients with significantly increased risk of malignancy.

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Thank you