Background

- Radiation recall phenomenon is an acute inflammatory reaction developing in previously irradiated areas after administration of inciting agents systemically.
- The most common agents are anticancer drugs. Most agents cause radiation recall dermatitis.
- Gemcitabine is a widely used chemotherapy medication by blocking DNA synthesis and repair. It seems to cause more internal organ damage than dermatitis.
- There has been no report of both myositis and pseudocellulitis induced by gemcitabine on the same patient.

Case Presentation

- A 66-year-old male with stage IIIa squamous cell carcinoma of the right upper lung and stage I squamous cell carcinoma of the left supraglottic larynx, was treated with chemoradiation after Right anterior axillary thoracotomy with bilobectomy and En-bloc chest wall resection.
- He received concurrent radiation, carboplatin and paclitaxel. One month later, he received cisplatin and gemcitabine as adjunct therapy.
- One week after finishing all therapies, which was 104 days from last radiation therapy, patient developed severe neck, throat and right shoulder pain, accompanied by neck soft tissue erythema and swelling. He was having a lot of brown-greenish thick secretions in his throat with dysphagia and onydophagia. There was no superficial change of right shoulder, but he did have exquisitely tenderness with about 10 degree motion did not improve at all after 4-day zosyn.
- Myositis were entertained as the diagnosis. Patient received naproxen followed by prednisone taper, which resolved his neck pain, swelling and frozen shoulder.
- Repeated CT of the chest also showed improved soft tissue inflammation after 2 weeks steroid tapering treatment.

Discussion

- Gemcitabine-induced radiation recall phenomenon is a rare but real disease entity.
- It may mimic many other inflammatory or infectious diseases.
- It is important to bear this diagnosis in mind when a patient develops symptoms in a previously irradiated area.
- Anti-inflammatory/corticosteroid treatments still remain the mainstay therapy with good responses.

References