

암재활

게시일시 및 장소 : 10 월 18 일(금) 08:30-12:20 Room G(3F)

질의응답 일시 및 장소 : 10 월 18 일(금) 10:28-10:32 Room G(3F)

P 1-55

Case report : Gemcitabine-induced radiation recall myositis

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Introduction

Recall myositis should be considered in patients under palliative cancer therapy presenting sudden edema of extremity combined with severe pain. Radiation recall is an uncommon phenomenon in which administration of a chemotherapy or another systemic agent induces an acute inflammatory reaction in previously irradiated tissues, often weeks to years after completion of radiotherapy. Gemcitabine can induce an inflammatory reaction within an area of prior radiation.

Case report

A 56-year-old male patient visited emergency room presenting both thigh edema and severe pain. He had a history of nasopharyngeal cancer with metastasis to lung, both femur, and pelvic bone. Both femur and pelvic bone metastasis was treated with palliative radiation therapy. He presented emergency department 9 month after completing the final course of radiotherapy, 6 month after the first dose of gemcitabine, and 1 month after the final dose of gemcitabine. There was obvious enlargement of both thigh with firmness and tenderness. The patient complained of severe pain at knee flexion and the range of motion of knee joint was limited without loss of muscle strength. Initial laboratory study showed remarkably elevated creatine kinase and myoglobin, suggesting myopathic feature. On Magnetic resonance imaging (MRI), diffuse enhancement in bilateral pelvic girdle and thigh muscles was observed. Given that edema was most pronounced in the region of remote radiation fields and symptom was noted after chemotherapy but not after radiation therapy, gemcitabine-induced radiation recall myositis was more relevant than radiation myositis. After diagnosis, methylprednisolone was administered and the patient's pain, swelling, limitation of knee joint motion dramatically improved. MRI, conducted 4 months after, showed progression of diffuse heterogeneous enhancement in both anterior compartment thigh muscle and gluteus muscle. Physical therapy of gentle stretching and passive range of motion exercise was performed. The patient received gait training with bilateral ergo cane in order to prevent possible fracture of metastatic femur during weight bearing.

Conclusion

Gemcitabine-induced radiation recall myositis is a phenomenon wherein the administration of gemcitabine induces an inflammatory reaction within an area of prior radiation. Although sudden bilateral femoral pain and edema are usually suspected of femur fracture, deep vein thrombosis, cellulitis and radiation induced myositis or fibrosis, it is important to include radiation recall as part of differential diagnosis when a patient undergoing chemotherapy experiences an inflammatory reaction at a prior site of radiation.

2017.09	CCRT : Nasaopharyngeal cancer with metastasis -> s/p CCRT with SCCP #3, s/p FP #2
2018.01	RT : metastasis to lung and bone aggravation -> palliative RT (both femur + pelvis)
2018.04	CTx : gemcitabine chemotherapy start
2018.10.16	both thigh edema and pain occur
2018.10.29	CTx : Gemcitabine C8D8 done (last)
2018.11.21	both thigh edema and pain aggravation -> MRI : r/o radiation recall myositis -> Steriod Tx
2019.02.07	both thigh edema and pain recur after tapering off steriod -> Steriod Tx
2019.03.28	both thigh edema and pain recur -> MRI : Interval progression of radiation-induced myositis

Fig1. Time line of the case

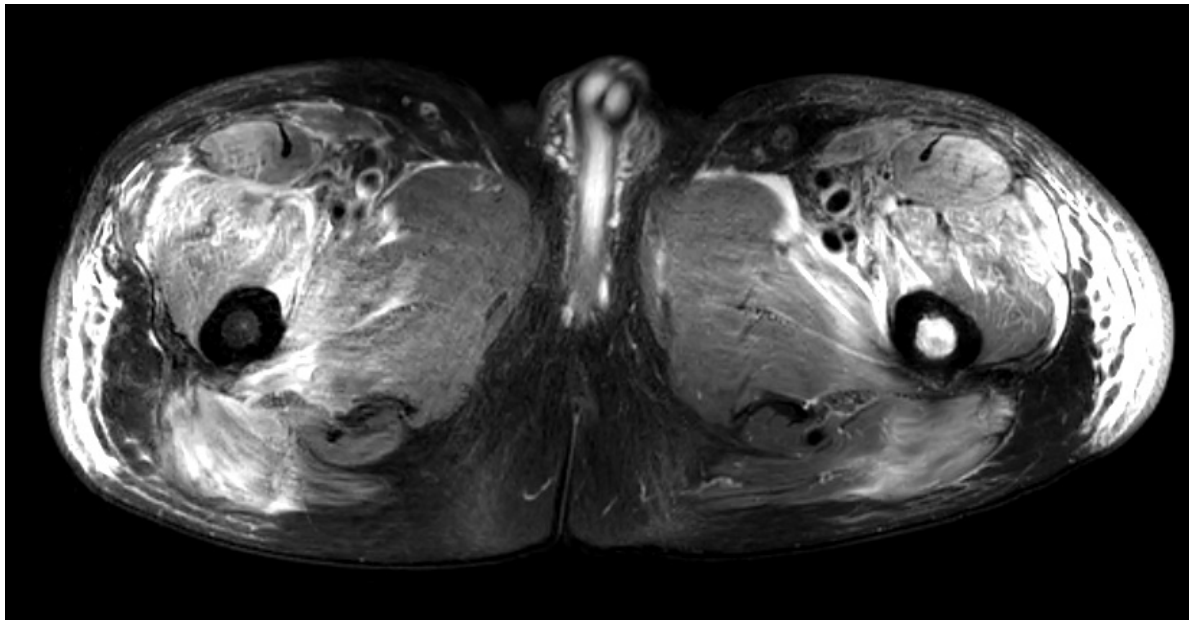


Fig2. MRI axial view of patient



Fig3. MRI coronal view of patient