



Avascular Necrosis of the Femoral Head – A Case Study in Hyperbaric Oxygen Treatment



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INTRODUCTION:

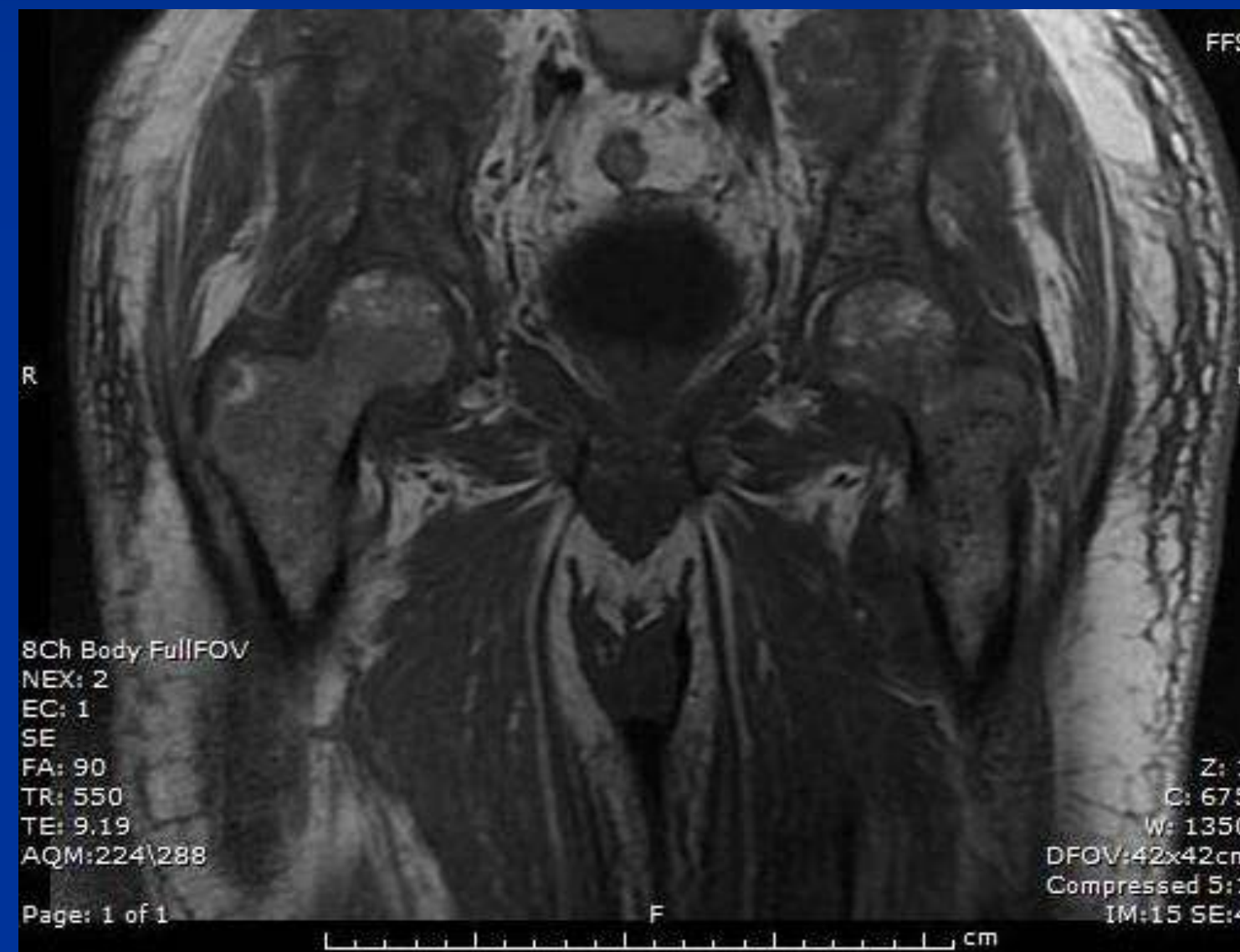
We report a case of HBO used to treat avascular necrosis of the femoral head. Significant pain reduction was found at the end of therapy.

METHODS:

A 47 year old male was initially admitted to an outside hospital for perforated diverticulitis. Colectomy and Hartman pouch was performed, which unfortunately led to the development of pelvic abscesses and pelvic osteomyelitis. Surgical debridement and drainage was required and after a long course of intravenous antibiotics the patient's infection cleared. However, our patient continued to complain of left hip pain. He was diagnosed with aseptic avascular necrosis (AVN) of the hip. He underwent 40 HBO treatments at 2.5 ATA for 90 minutes.

RESULTS:

Significant pain reduction was found at the end of 40 HBO treatments. At subsequent patient follow-up he reported a reduction in pain from 8/10 to 0/10 pain with increased range of motion of his hip. His opiate requirements were greatly reduced, and he reported that he was being weaned from them. The patient's activities of daily living improved enough to allow for physical therapy. He reported an increase in his social activity as a result including multiple weekly trips out of the house with family to places such as the mall



Pre-HBO - MRI Pelvis: Suggestive of osteomyelitis/osteonecrosis of the hip

SUMMARY / CONCLUSIONS:

HBO for avascular necrosis of the femoral head has not been a well established treatment modality. However, we present a case of successful pain reduction and opioid requirements from a patient with AVN of the femoral head after 40 treatments. This resulted in an improved quality of life for the patient. HBO may be of benefit for AVN and warrants further study.



Post-HBO - X-ray of Pelvis: Evidence of left femoral head collapse from AVN. No evidence of osteomyelitis