Abstract

Introduction: The aim of this study was to investigate the potential of using $^{188}$Re Lipiodol for selective internal radiation therapy of inoperable hepatocellular carcinoma (HCC). Clinical Picture: A 33-year-old female with poorly-differentiated multicentric HCC, elevated alpha-fetoprotein (AFP) and increased serum alkaline phosphatase. Treatment: Over a 2-month interval, the patient was treated twice with 4GBq of $^{188}$Re-TDD-Lipiodol. Outcomes: There was good localisation of $^{188}$Re Lipiodol in the tumours, but also in thyroid (first treatment) and gastrointestinal tract (both treatments). So far (5 months post-treatment), the patient remains well with stable disease. Conclusions: $^{188}$Re Lipiodol can be an effective radiopharmaceutical for the treatment of HCC; however, more work must be done to minimise the uptake in bowel.

Key words: Selective internal radiation therapy, Radiopharmaceutical, Radiation absorbed dose