Meeting ReportOncology-Clinical Diagnosis: Solid Tumors

Repeated low-dose Sm-153-EDTMP therapy using the Vienna protocol is effective in pain palliation and lesion regression

Helmut Sinzinger, Barbara Palumbo, Susanne Granegger, Christian Kratzik, Renato Palumbo and Jukka Hiltunen

Journal of Nuclear Medicine May 2008, 49 (supplement 1) 369P;

- **Article**
- Info & Metrics

Abstract

1560
Objectives: In 1996 we described the Vienna protocol based upon a dose of 1,1GBq (30mCi) Sm-153-EDTMP administered 5 times in 3 months intervals on an outpatient base followed by 5 further applications in 6- and then in 9 months intervals.
Methods: 200 patients suffering from hormone refractory prostate cancer (49-93a) with >1 bone lesion and/or bone pain receiving the 1st year therapy are presented. Bone uptake intraindividually was rather constant (<+/-5%)with a high interindividual variation from 36% to 85% (mean=58,6%).
Results: Pain palliation was achieved completely in 53%, partially in 41% and failed in 6%. Duration of analgetic effect shortest was 8 weeks. PSA decreased in 21%, was stable in 48% and increased in 12%. A temporary increase (4-8 weeks) was observed in 19% followed by a longer lasting decrease. Flare phenomenon was rare (4%). Nadir of platelets (28,7d) was followed by white (30,7d) and red blood cells (37,7d). Lesion regression assessed by scintigraphy and MR was first seen after 2nd therapy (2%), increasing after 5th application to 41%. No predictive parameter as to the response was discovered. Decrease in PSA and adhesion molecules (ICAM, VCAM, E-selectin, nadir at 9-12 weeks) was significantly more pronounced in patients on statin treatment and positively correlated to red blood cells (r=0,73) and haemoglobin (r=0,75). Repeated therapy induced a further decrease. Quality of life, analgetics consumption, pain and Karnovsky score and WHO questionnaire showed a significant improvement.
Conclusions: Early and repeated Sm-153-EDTMP is the key to an improved therapeutic benefit both concerning pain palliation and lesion regression.

-