

## **FIRST EXPERIENCES IN THE TREATMENT OF PAINFULL BONE METASTASIS**

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**INTRODUCTION:** Bone metastases are a common complication in patients with prostate, breast, lung and kidney cancer. The therapeutic approach is currently based on pain palliation that is achieved by systemic therapy (analgesics, hormones, chemotherapy, bisphosphonates) and local treatments (surgery, external beam therapy) and very often it is combined with the use of different radiopharmaceuticals.

**AIM OF THE STUDY:** To show the first experiences in the treatment of painful bone metastasis with Strontium- 89 ( $^{89}\text{Sr}$ ) and Samarium- 153 ( $^{153}\text{Sm}$ ).

**MATERIAL AND METHODS:** Five patients were treated with  $^{89}\text{Sr}$ , while six patients were treated with the use of  $^{153}\text{Sm}$ . In all of them before therapy bone scintigraphy was made with Tc-99m-DPD in order to verify number, localization and the extent of bone metastasis.

**RESULTS:** The results showed us that in a great number of patients we achieved lowering of pain, improved quality of life and reduced the need for analgesics. The effects lasted from 1- 3 months after therapy.

**CONCLUSION:** The use of radiopharmaceuticals in the treatment of painful bone metastasis is simple, well tolerated and can be combined with other forms of therapy.

**Key words:** bone metastasis, pain, treatment, radiopharmaceuticals.