

The background of the slide is a light gray gradient with several realistic water droplets of various sizes scattered across it. The droplets have highlights and shadows, giving them a three-dimensional appearance.

# **CASE REPORT OF A RENAL CELL CARCINOMA SKIN METASTASIS TREATED LOCALLY WITH CONTACT BRACHYTHERAPY**

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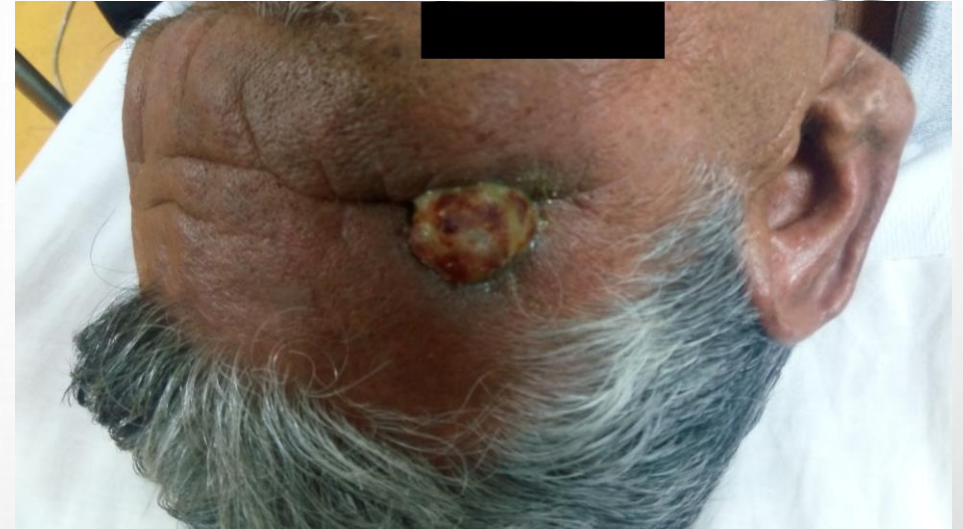
# **INTRODUCTION**

**SKIN MALIGNANCIES HAVE BEEN A RADIOTHERAPY TARGET FOR A LONG PERIOD OF TIME. USUALLY RADIOTHERAPY TREATS NON-MELANOMA SKIN CANCERS, PARTICULARLY AS AN ADJUVANT TREATMENT OR WHEN PRIMARY SURGICAL TREATMENT FAILS TO CONFINE THE MALIGNANT SPREAD. BRACHYTHERAPY DUE TO ITS CHARACTERISTICS IS AN IDEAL RADIOTHERAPY TREATMENT OF CHOICE. HOWEVER, SOMETIMES ALSO METASTATIC TUMORS ARISE IN SUPERFICIAL AND SKIN TISSUES.**

**SUCH WAS THE CASE OF 68 YEARS OLD MALE PATIENT, WHO CAME TO OUR CLINIC - IT WAS A CASE OF A METASTATIC RECIDIVANT TUMOR. TUMOR PRESENTED IN PATIENT'S RIGHT SUPRAORBITAL ARCH WITH DIMENSIONS OF (4 X 3 X 3 CM) AND IT WAS VULNERABLE TO TOUCH. PATIENT HAD PAIN ORIGINATING FROM HIS RIGHT SUPRAORBITAL ARCH. HISTOPATHOLOGY SHOWED TO BE A SECONDARY (METASTATIC) TUMOR OF A PREVIOUSLY SURGICALLY TREATED KIDNEY CANCER (CLEAR CELL RENAL ADENOCARCINOMA).**

## **OBJECTIVE**

**DUE TO PATIENT'S COMORBIDITIES THERE WERE NO OPTIONS FOR SURGICAL OR SYSTEMIC ONCOLOGICAL TREATMENT, THUS IT WAS DECIDED TO REDUCE THE PAIN BY TREATING THE TUMOR WITH BRACHYTHERAPY IN PALLIATIVE SETTING.**



## **METHODS**

**PATIENT RECEIVED A TOTAL OF 5 FRACTIONS (ONE A WEEK) OVER THE COURSE OF 28 DAYS OF HDR-BRACHYTHERAPY BY USING A SURFACE CONTACT APPLICATOR (BA 40 MM) WITH A PRESCRIBED DOSE OF 7Gy ON A DEPTH OF 7MM AND AN ESTIMATE SURFACE DOSE OF 11.6 Gy PER FRACTION. PATIENT RECEIVED TOTAL BRACHYTHERAPY DOSE OF 35 Gy (AN ESTIMATED SURFACE DOSE OF 58 Gy) AND ESTIMATED EQD2 DOSE ( $\alpha/\beta=5$ ) OF 60 Gy.**

# **RESULTS/CLINICAL OUTCOME**

**ON THE FIRST CHECK-UP PATIENT REPORTED THAT THE PAIN SUBSIDED TO A SIGNIFICANT LEVEL OF DECREASE (ALMOST NON-EXISTANT) WHILE LOCALLY THERE WAS AN EVIDENT TUMOR SHRINKAGE WITH A SMALL RESIDUAL MASS PRESENT (MEASURING SEVERAL MILLIMETERS ACROSS) SITUATED AT THE BOTTOM OF THE OPERATIVE LACUNAR DEFECT. SADLY, PATIENT DID NOT SHOW ON THE NEXT APPOINTMENTS.**



# **CONCLUSION**

**WE MAY CONCLUDE THAT EVEN A CONSIDERED RADIORESISTANT TUMORS WITH LOW RATE ALPHA/BETA RATIOS LIKE IN THIS PRESENTING CASE, CAN BE SUCCESSFULLY TREATED WITH HDR-BRACHYTHERAPY (IF IT IS SITE APPLICABLE).**

