

PP04

CORRELATION BETWEEN PROSTATE CANCER LOCALIZATION IN MULTIPAREMETRIC MAGNETIC RESONANCE IMAGING AND RADICAL PROSTATECTOMY HISTOPATHOLOGY

P. Contreras, L. Blas, H. Rios Pita, M. Mieggi, E. Mondelo, A.M. Chirife

Hospital Alemán, Buenos Aires, Argentina

Introduction & Objectives: Multiparametric prostate magnetic resonance imaging (MP-MRI) helps to target biopsies improving sensitivity and specificity but there are currently no many studies comparing MP-MRI with radical prostatectomy specimens. Our objective was to know the correlation between prostate cancer localization in multiparametric magnetic resonance imaging (MP-MRI) and radical prostatectomy histopathology.

Methods: Data from a cohort of men who underwent MP-MRI and radical prostatectomy between January 2013 and September 2015 at the Hospital Aleman of Buenos Aires were reviewed. MP-MRI images were obtained using a Phillips 1.5 T. High-resolution T2-weighted images (T2WI) were obtained follow by diffusion weighted imaging (DWI), MR spectroscopic imaging (MRSI) and MRI (DCE-MRI). Images were reviewed by a single physician with more than 10 years of experience in prostatic MRI and every MP-MRI sequence was analyzed. From radical prostatectomy specimens, whole-mount histological sections were studied and informed by 2 expert prostate cancer pathologists, each with more than 10 years of experience.

Results: Data from 9 patients were analyzed. Laparoscopic radical prostatectomy was made in 6, and open approach in 3 patients. Results are summarized in table I.

Pte	Age	PSA	T2 c	T2 p	D WI
1	66	8.23	1	3	4
2	53	5.68	2	4	4
3	61	13.8	1	3	3
4	66	7,3	2	4	4
5	45	6.06	2	4	5
6	69	6.50	1	5	4
7	64	11.54	2	5	5
8	69	8.36	1	4	4
9	69	8.11	1	4	5

Conclusions:

Multiparametric magnetic resonance imaging was correlated with histopathological prostate cancer distribution. T2WI + DWI were particularly effective in detecting cancer localization. Source