Whole-body MRI with diffusion-weighted imaging is an accurate technique for depicting ovarian carcinomatosis prior to surgery.

We have compared WB-MRI/DWIBS findings in 61 consecutive patients that were surgical candidates for ovarian cytoreduction and other gynecologic malignancies.

For that, we used the PCI system described by Sugarbaker as a common tool for surgeons and radiologists.

All samples were pathologically demonstrated and we considered presence/absence of tumor for calculating regional and global diagnostic performance.

Introduction

Preoperative cross sectional imaging is useful to define tumor burden and resectability. Successful cytoreductive surgery is a prognostic factor for survival in advanced ovarian cancer.

We show our preliminary results for diagnostic performance in ovarian carcinomatosis.

Pelvis followed by right hyponchondrium and central abdomen are the areas with the highest rate for tumor detection. Conversely, intestinal regions are the ones where less tumor can be found.

Figure 1:

- a. Coronal DWIBS. Perihepatic carcinomatosis and in falciform ligament (arrowheads), omental cake, pelvic and left flank implants (arrows).
- b. Fused coronal T2 and red-scale DWIBS imaging.
- c. PCI index.
- d. Axial T1-Gd enhanced and red-scale DWIBS imaging with implants in Morrison space.

Figure 2:

Regional distribution for WB-MRI/DWIBS (Percentage in blue scale) compared with surgical findings. (Percentage in red scale)

Overall: 29.25%

Overall: 25.85%

Quantification of WB-MRI/DWIBS findings is mandatory. Using PCI is promising as a communication tool for radiologists and surgeons.