

XXXII CONGRESSO NAZIONALE AIRO
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XII CONGRESSO NAZIONALE AIRO GIOVANI

AIRO2022

Radioterapia di precisione per un'oncologia innovativa e sostenibile

BOLOGNA, 25-27 NOVEMBRE
PALAZZO DEI CONGRESSI



Fondazione IRCCS
Istituto Nazionale dei
Tumori di Milano



Associazione Italiana
Radioterapia e Oncologia clinica



Società Italiana di Radiobiologia



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BRACHITERAPIA A GUIDA DI IMMAGINE E IMPLEMENTAZIONE DELLA TECNICA INTERSTIZIALE NEL CARCINOMA DELLA CERVICE UTERINA LOCALMENTE AVANZATO

Relatore: Brigida Pappalardi

IRCCS Fondazione Istituto Nazionale Tumori - Milano



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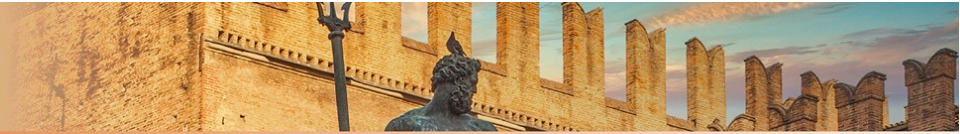


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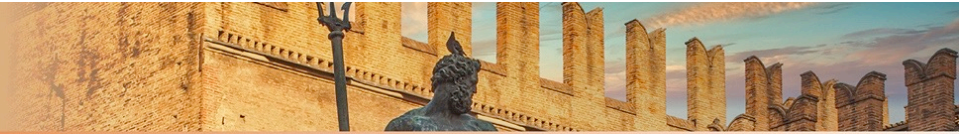


DICHIARAZIONE

Relatore: BRIGIDA PAPPALARDI

Come da nuova regolamentazione della Commissione Nazionale per la Formazione Continua del Ministero della Salute, è richiesta la trasparenza delle fonti di finanziamento e dei rapporti con soggetti portatori di interessi commerciali in campo sanitario.

- Posizione di dipendente in aziende con interessi commerciali in campo sanitario **(NIENTE DA DICHIARARE)**
- Consulenza ad aziende con interessi commerciali in campo sanitario **(NIENTE DA DICHIARARE)**
- Fondi per la ricerca da aziende con interessi commerciali in campo sanitario **(NIENTE DA DICHIARARE)**
- Partecipazione ad Advisory Board **(NIENTE DA DICHIARARE)**
- Titolarità di brevetti in compartecipazione ad aziende con interessi commerciali in campo sanitario **(NIENTE DA DICHIARARE)**
- Partecipazioni azionarie in aziende con interessi commerciali in campo sanitario **(NIENTE DA DICHIARARE)**
- Altro



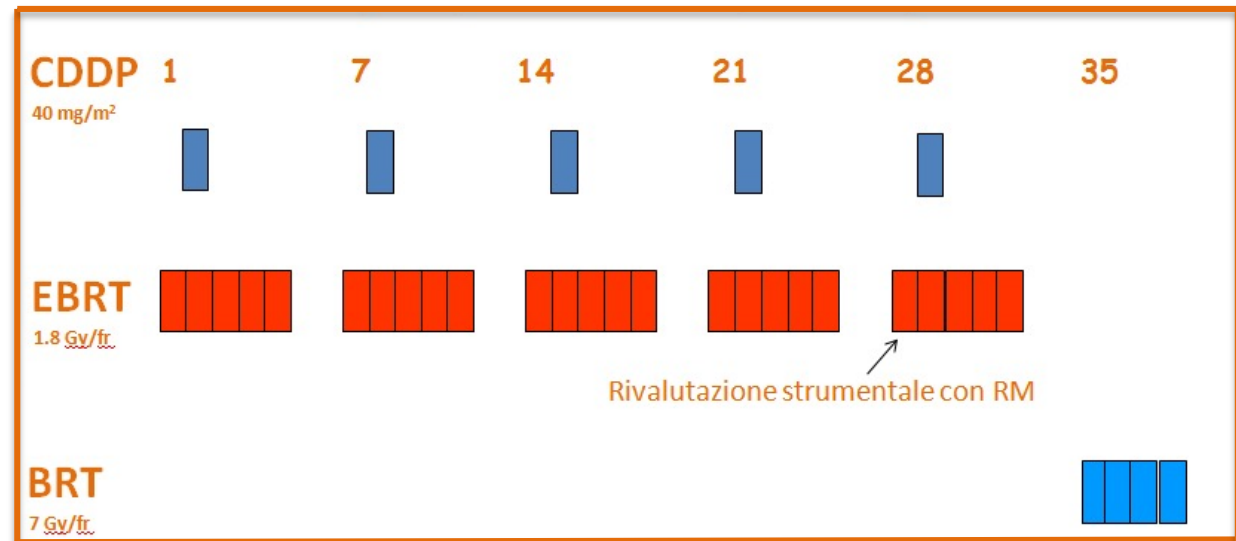
Aims

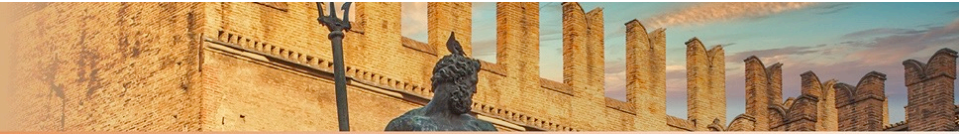
The standard of care for women diagnosed with Federation of Gynecology and Obstetrics stage IB2 to IVA cervical cancer (*locally advanced uterine cervical cancer- LAUCC*) is:

→ concurrent chemoradiation

followed by

→ brachytherapy (BRT).



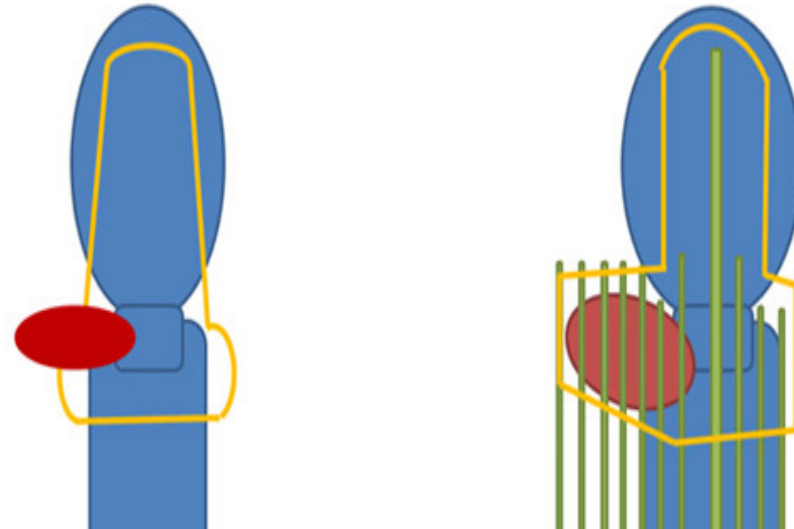


Aims

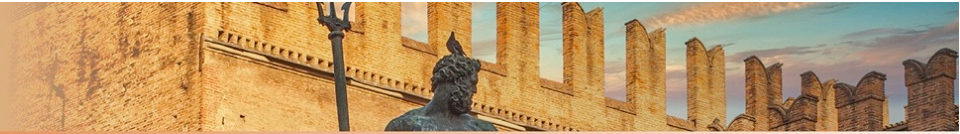
Supplemental interstitial catheters may be added in order to cover the maximum extent of gross residual disease



Combined IC/IS Brachytherapy (HBT)

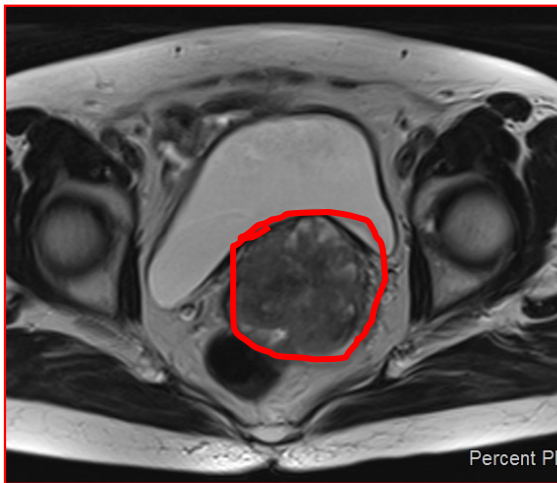


The incorporation of magnetic resonance imaging in BT (Image Guided Adaptive Brachytherapy, IGABT) has increased the use of HBT in order to create a comprehensive treatment plan that covers the visualized tumor.



Methods

- Between January 2018 and December 2021, 195 patients with LAUCC were treated with primary chemoradiation including BRT (780 BRT, 182 HBT).
- At the time of IGABT, the majority of women had a decrease in gross tumor size from 50.4 cc to 35.7 cc.

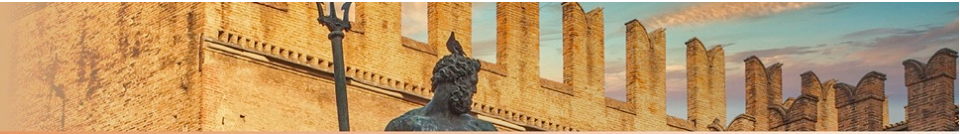


MR pre- EBRT



MR pre- BT

Interstitial needles, with the use of an intracavitary tandem, has been selected for patients with large cervical lesions at time of BT. A preliminary plan helped determine where to insert needles to increase the delivered dose.



Results

- Median follow-up was 23 months (range 1 – 57).
- Local control rate was 90,8% (several retrospective studies have shown local control rates of >85%-90%).
- 18 patients experienced loco-regional recurrence (9,2%):
 - 13 (6,6%) were confined to the uterus/ parametria and 5 to pelvic lymphnodes.

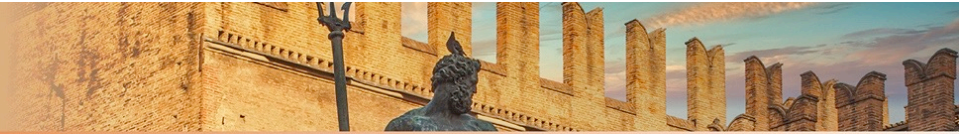
GU/GI TOXICITY

GRADING (sec. CTCAE)	Acute toxicity	Late toxicity
≥ G2	18% (35 pts)	5,6% (11 pts)

VAGINAL TOXICITY

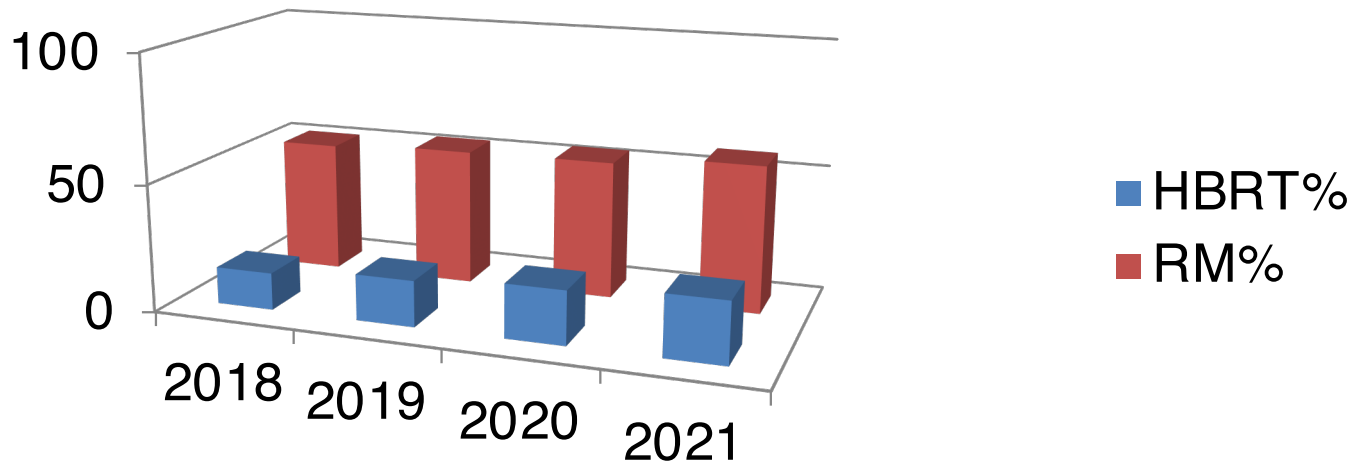
GRADING (sec. CTCAE)	Acute toxicity	Late toxicity
≥ G2	2,6% (5 pts)	26,7% (52 pts)





Conclusions

The precision availed by MR-guided brachytherapy results in substantial improvements in needle positioning, and resulting treatment plans. Hybrid brachytherapy (HBRT) can be performed safely and with a high quality of radiation dose distribution.

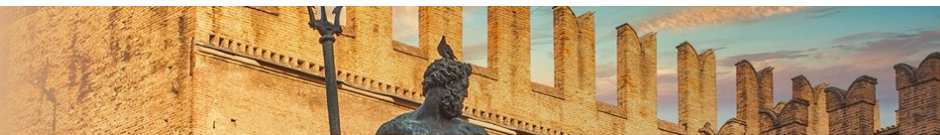


Education and training are very important to maintain brachytherapy expertise and skills in the management of LAUCC.

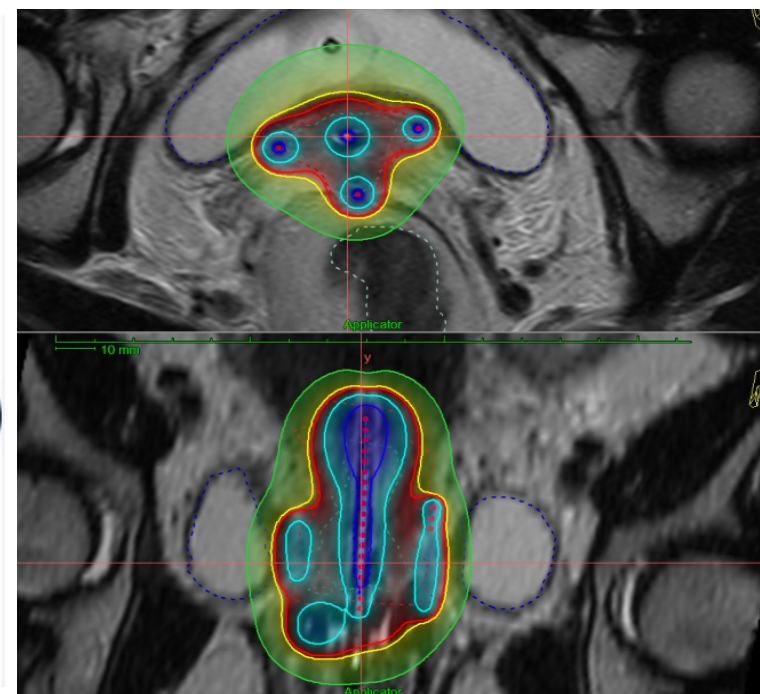
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GRAZIE PER L'ATTENZIONE!



Brigida.Pappalardi@istitutotumori.mi.it



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