The Key Role of **Medical Imaging in Cervical Cancer** Management

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"Thanks to radiotherap I had a fair chance against cancer" **Together in the Fight against Cervical Cancer**

Friday, 7 February 2020 Vienna International Centre



Patient clinical history

This 45 y.o. woman consults her gynaecologist for bleeding between menstruation cycles and vaginal discharge (leucorrhea)





Visual examination (colposcopy)

Showed an ulcerated and bleeding lesion in the cervix





Biopsy and Pathology



Reveals a tumour invading the cervix



Transvaginal Ultrasound



Showed a mass of the cervix that has concerning characteristics (solid, hypoechoic, hyper vascular)



Magnetic Resonance

HyperT2 mass of the cervix



Invasion of Left parametrium

A pelvic MRI is performed to evaluate if there is the local extension beyond the cervix



PET-CT study

Was performed to evaluate the extension of the tumor, beyond the pelvis



High FDG uptake by the cervical tumor



PET-CT study



No lymph node involvement (N stage)

No distant metastases (M stage)



Importance of PET-CT Staging



High FDG uptake by the left pelvic metastatic lymph node PET-CT identify a left pelvic lymph node involvement no distant metastases



TNM Cancer Staging App by IAEA



Android



iPhone

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TNM classification developed and maintained by the Union for International Cancer Control. It is also used by the American Joint Committee on Cancer. T describes the size of the original (primary) tumour and whether it has invaded nearby tissue, N describes nearby (regional) <u>lymph nodes</u> that are involved, M describes distant <u>metastasis</u> (spread of cancer from one part of the body to another).

- App developed by the IAEA in collaboration with Tata Memorial Centre, India.
- Permits staging cancer disease in an easy way
- Designed in a simple, user-friendly format that will be useful for oncologists, gynaecologists, medical students and residents



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FIGO Gyn Cancer Management App by IAEA

- Designed for health professionals.
- It provides the latest FIGO Staging and recommended investigation tools for the confirmation of diagnosis and management of each Gyn cancer.
- Designed in a simple, user-friendly format that will be useful for oncologists, gynaecologists, medical students and residents



The treatment is based on the results of medical imaging and corresponding FIGO classification









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