Summary & Conclusion

Cervical cancer is the third most common gynaecological malignancy. With the development of the Papanicolaou smear in the 20th century, there has been a significant drop in mortality. However, only minor improvement has been achieved in the survival of invasive cervical carcinoma.

Staging is crucial for determining prognosis and appropriate therapy. Recommendations for diagnostic evaluation of tumor stage are derived from the TNM/FIGO clinical staging system. There are several prognostic indicators, the most critical of which are depth of invasion, parametrial extension and lymph node involvement.

In practice, **Ultrasonography** is the primary imaging modality for evaluation of cancer cervix .It is sensitive ,non invasive &relies on morphologic assessment of tumor, with the aid of color Doppler to detect its vascularity .Other modalities such as 3DH has a role in local staging of cancer cervix

Despite the fact that MRI and computed tomography (CT) have high accuracy for the diagnosis and evaluation of the response to therapy in cancer cervix, they have been found to be expensive and hardly reproducible. This is the reason why some investigators focused on CDUS as an alternative and simpler diagnostic tool than MRI for the follow-up of cervical cancer vascularity

MRI Magnetic resonance imaging; High accuracy in the depiction of parametrial invasion, tumor location, size, depth and uterine extension and equality to CT in nodal staging, makes MRI the best single imaging

modality for primary staging , therapy planning, evaluation & follow up of cervical carcinoma

Developments in MRI will further increase its potential as a diagnostic and follow-uHp tool . Gadolinium –enhanced MRI is more accurate in assessment of cervical carcinoma than US and non-enhanced MRI..Diffusion weighted MRI is an ultra fast sequence without contrast material that can be added to routine MRI protocol for detection of smaller lesions.

The use of **lymph node–specific MRI contrast agents**, such as ultra small superparamagnetic iron oxide (USPIO) particles, has been shown to improve the sensitivity and retain the high specificity of detection of lymph node metastases in patients with endometrial and cervical cancer. is useful for evaluation of cancer cervix . It can identify the staging ,response to treatment, detect the complications and therapy planning

Conclusion: Both US and MRI are useful either interchangeably or in combination with each other. Ultrasound is the initial method to evaluate pelvic organs in symptomatic patients. MRI should be used to determine staging and extention.