Diagnostic work up and staging in carcinoma cervix

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REGIONAL CANCER CENTRE
DEPTT. OF RADIO THERAPY
PGIMER CHANDIGARH
Cervical Cancer

Magnitude of the Problem:

- Cervical cancer is the SECOND most common cancer of women
- worldwide 500,000 new cases identified each year

INDIA

- Commonest carcinoma in females
- 1.3 lakh/year
Transformation zone
Current Understanding:

- **Normal Cervix**
- **HPV-related Changes**
- **Low-Grade SIL (Atypia, CIN I)**
- **High-Grade SIL (CIN II, III/CIS)**
- **Invasive Cancer**

- **HPV Infection**
- **Cofactors High-Risk HPV (Types 16, 18, etc.)**

- About 60% regress within 2-3 yrs
- About 15% progress within 3-4 yrs
- 30% - 70% progress within 10 yrs
Diagnosis of preinvasive stage

- CYTOLOGIC SCREENING
- VISUAL INSPECTION
- COLPOSCOPY
- BIOPSY
- ENDOCERVICAL CURRETTAGE
Sensitivity of PAP 51%  
FALSE NEG – 5-50%  
20% LAB ERRORS
VISUAL INSPECTION METHOD

simple speculum examination

VISUAL INSPECTION WITH ACETIC ACID (VIA)

- Acetic acid – malignant cells stain white
  - Dissolves mucus
  - Induces intracellular dehydration
  - Causes coagulation of protein

Sensitivity and specificity of VIA - 70-92%

VISUAL INSPECTION LUGOLS IODINE

Iodine being glycophilic stains only the normal squamous epithelium-mahogany brown or black

Sensitivity 91.7% specificity 85.9%
## Colposcopy Indications

- Suspicious-looking cervix
- Invasive carcinoma on cytology
- CIN 2 or CIN 3 on cytology
- Persisting (for more than 12-18 months) low-grade (CIN 1) abnormalities on cytology
- CIN 1 on cytology
- Persistently unsatisfactory quality on cytology
- Infection with oncogenic human papillomaviruses (HPV)
- Acetopositivity on visual inspection with acetic acid (VIA)
- Acetopositivity on visual inspection with acetic acid using magnification (VIAM)
- Positive on visual inspection with Lugol’s iodine (VILI)
Colposcopy contd...

Magnification 16 times

4 main features

colour changes
Intensity of acetowhitening
Marjins &contour
Vascular features

mosaic

punctuation
Biopsy

Colposcopy available
suspicious area

Punch Biopsy
Or 4 quadrant biopsy

Colposcopy Not available
Employing Schiller’s or Lugol’s iodine

Ring biopsy from Squamocolumnar junction
Conisation (cone biopsy)

❖ When?
❖ Unsatisfactory colposcopic findings
   entire margins not visualised
❖ Inconsistent findings – colposcopy, cytology & directed biopsy
❖ Positive endocervical curettage
❖ To exclude gross invasive ca

IT IS DIAGNOSTIC AS WELL AS THERAPEUTIC
ENDOCERVICAL CURETTAGE

 ✓ MANDATORY after conisation
 ✓ SPECIALLY IF referral cytology indicates a glandular lesion
 ✓ If colposcopy unsatisfactory / not revealed any abnormality
 ✓ as yield of ECC is very low neg ECC should not suggest absence of neoplasia
INVASIVE CARCINOMA
✓ 80% of lesions – ectocervix

Frank growth --- exophytic --- friable, involves upper vagina

ulcerative --- excavating cervix, vag fornices

infiltrative --- endocervical growth

**HISTOPATHOLOGY**

90% squamous cell carcinoma

10% adenocarcinoma
Clinical Presentation

Asymptomatic Bleeding P/V --- post coital / spotting intermenstrual postmenopausal discharge P/V --- Foul smelling

PAIN-------pelvic/ hypogastic
lumbosacral epigastric
radiating to limbs

Fatigue, weakness
bladder & bowel complaints
Symptoms of metastasis
Uraemia Sepsis cachexia
Clinical examination

- GENERAL SURVEY
  - pallor
  - palpable neck nodes
  - pedal edema
  - B.P.

- SYSTEMIC EXAMINATION
  - P/A--- tenderness, palpable lump,
    - palpable liver, spleen
  - CHEST auscultation

- LOCAL EXAMINATION
  - speculum inspection--- preferably Cusco’s bivalve speculum
digital palpation per vaginum
  - bimanual palpation
  - rectal examination
Local examination

✓ Speculum examination
  red granular area on lips of cervix
growth– size, proliferative, necrotic,

✓ Per vaginal digital palpation
  exact nature of growth, friable bleeds to touch,
infiltrative proliferative,
size of growth, lips of cervix involved
vaginal fornices, walls of vagina

✓ Bimanual examination
  better reveals extent of growth to vagina,
induration of bladder base felt through ant fornix
in advanced cases

✓ Rectal examination
  note involvement of parametrium--- soft or indurated
  note whether **nodular**

  extent to lateral pelvic wall
rectal mucosal involvement
TUMOUR EXTENSION ON CLINICAL EXAMINATION

- 3 cm
- 4 cm
- 5 cm
Cervical Carcinoma - Outcome

Host Factors

- Anemia
- Performance status (weight loss)
- Age
INVESTIGATIONS

✓ I. ROUTINE / BASELINE INV

✓ II. DISEASE EXTENT

A. ENDOSCOPIC ASSESSMENT
B. RADIOLOGIC STUDIES
C. METASTASTIC WORK UP
Routine investigations

1. **HAEMOGRAM**
   - Hb, TLC, DLC, PLATELETS
   - Anaemia--blood loss
     - nutritionally deprived
     - depletion of Fe stores in prolonged intermittent bleeding
   - ---level of Hb affects prognosis
     **↓Hb → tumour oxygenation ↓**
     **radioresistance ↑**
   - **Biological aggressiveness, locoregional recurrence**
   - **Optimal level----11g/dl**

   Threshold for transfusion should be based on anaemia during treatment and not initial value
Renal function tests

- Urea
- Creatinine
  serves as a baseline before starting treatment by cisplatin based chemoradiation
  advanced diseases—
    ureteric involvement, hydronephrosis
    ↑ urea, creatinine

Liver function tests  baseline value
  elevated enzymes----indicates metastatic disease

Urine—routine &C/S
  baseline check for absence of any UTI
  symptoms of dysuria, increased frequency---in advanced stages

Chest X Ray  assessment of cardiopulmonary status
  rule out any lung mets
Endoscopic assessment

- 85% cases presenting to us are in advanced cases
- Endoscopic assessment for bladder invasion rectal invasion

CYSTOSCOPY:--

Visualisation of only mucosa---
- nodularity
- frank growth
- ridges & furrows----submucosal involvement if they remain fixed to growth during palpation (i.e. P/V or P/R during cystoscopy)

Bullous edema— as such does not indicate stage IV
Urinary malignant cytology

If cystoscopy not available urinary malignant cytology to detect bladder infiltration

Overall specificity – 93%

3 samples of urine specimen

Anticoagulant not necessary

Proctoscopy & sigmoidoscopy

Indications – symp – tenesmus constipation along with bleeding P/R, diarrhoea

Clinical correlation – nodularity in P/R
Imaging for bladder & bowel

For urinary tract - IVP
For Bowel - barium enema & fistulography

INTRAVENOUS PYELOGRAM

Indications – in all cases of stage II & above
- to detect ureter involvement
- extraluminal compression
- (? Enlarged paraaortic nodes)
- Hydroureteronephrosis
- Displacement of ureters
• Incidence of ureteral obstruction at diagnosis: 14 – 34.5%

• Sign of **advanced sidewall disease** or **bulky retroperitoneal adenopathy**
High Tumor Burden
- Mid/distal vag disease
- Hydronephrosis
- Unilateral/bilateral sidewall disease

Low Tumor Burden
- Upper vaginal disease
- Parametrial disease

Cervical Carcinoma - Outcome

Tumor Variables
- Stage
- Tumor volume
- Parametrial/sidewall invasion
- Hydronephrosis
- Uterosacral ligament invasion
Staging of carcinoma cervix

- 1929 - Radiologic subcommittee of Cancer Committee of the Health Organisation of the League of Nations began uniform staging of gynae cancers
- 1937 - League of Nations classification for cervical cancer published
- 1958 - staging by FIGO
FIGO staging

**Based on clinical evaluation** (inspection, palpation, colposcopy), roentographic examination of chest, kidneys, and skeleton;
endocervical curettage and biopsies

Endoscopic assessment by cystoscopy, proctoscopy, sigmoidoscopy
IVP for imaging urinary tract and to detect any hydronephrotic changes due to obstruction of ureters
Because of the low yield of cystoscopy, IVP, sigmoidoscopy, and barium enema- patients with growth limited to cervix may forgo these procedures

With clinical evidence of more advanced disease, however, cystoscopy and IVP are recommended in the pretreatment assessment.

Lymphangiograms, USG, CT, MRI, are not used for clinical staging
<table>
<thead>
<tr>
<th>FIGO</th>
<th>Stage</th>
<th>Invasive carcinoma</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Carcinoma in situ (preinvasive carcinoma)</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Carcinoma confined to cervix (extension to corpus should be disregarded)</td>
<td></td>
</tr>
<tr>
<td>1a</td>
<td>Invasive carcinoma diagnosed only by microscopy. All gross lesions even with superficial invasion are stage 1B cancers. Invasion is limited to measured stromal invasion with maximum depth of 5.0 mm &amp; no wider than 7.0 mm</td>
<td></td>
</tr>
<tr>
<td>1a1</td>
<td>Stromal invasion no greater than 3.00 mm in depth and 7.00 mm or less in horizontal spread.</td>
<td></td>
</tr>
<tr>
<td>1a2</td>
<td>Stromal invasion more than 3.0 mm and not more than 5.0 mm with horizontal spread 7.0mm or less</td>
<td></td>
</tr>
</tbody>
</table>
Stage IA1 previously (1985 FIGO revision) was defined as “minimal microscopically evident stromal invasion” and invasion of 5 mm or less in depth or 7 mm or less in horizontal spread as stage 1A2

<table>
<thead>
<tr>
<th>depth</th>
<th>Pelvic node mets</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;3mm</td>
<td>&lt; 1 %</td>
</tr>
<tr>
<td>3-5 mm</td>
<td>1-8 %</td>
</tr>
<tr>
<td>&gt; 5 mm</td>
<td>5-13 %</td>
</tr>
</tbody>
</table>

1995- FIGO revision -
1A1- invasion upto 3mm deep & 7 mm wide
1A2- invasion between 3 and 5 mm deep & 7 mm wide
<table>
<thead>
<tr>
<th>FIGO stages</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1B</td>
<td>Clinically visible lesion confined to the cervix or microscopic lesion greater than 1A2</td>
</tr>
<tr>
<td>1B₁</td>
<td>Clinically visible lesion 4.0cm or less in greatest dimension</td>
</tr>
<tr>
<td>1B₂</td>
<td>Clinically visible lesion more than 4 cm in greatest dimension</td>
</tr>
<tr>
<td>II</td>
<td>Tumor invades beyond cervix but not to pelvic wall or lower third of the vagina.</td>
</tr>
<tr>
<td>II a</td>
<td>The carcinoma involves the vagina but not as far the lower third. Without parametrial invasion</td>
</tr>
<tr>
<td>II b</td>
<td>Tumor invades beyond cervix with parametrial invasion but not upto pelvic wall</td>
</tr>
<tr>
<td>FIGO stages</td>
<td>Description</td>
</tr>
<tr>
<td>-------------</td>
<td>-------------</td>
</tr>
<tr>
<td>III</td>
<td>Tumour extends to pelvic wall. On rectal examination there is no cancer free space between the tumor and the pelvic wall. The tumour involves the lower third of vagina. All cases with a hydronephrosis or nonfunctioning kidney are included unless they are known to be due to other causes.</td>
</tr>
<tr>
<td>IIIa</td>
<td>Tumor involves lower third of vagina no extension pelvic wall.</td>
</tr>
<tr>
<td>IIIb</td>
<td>Tumor extends to pelvic wall and/or causes hydronephrosis or non-functioning kidney.</td>
</tr>
<tr>
<td>FIGO</td>
<td>stages</td>
</tr>
<tr>
<td>------</td>
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</tr>
<tr>
<td>IV</td>
<td>Carcinoma extended beyond the true pelvis or has clinically involved the mucosa of the bladder or rectum.</td>
</tr>
<tr>
<td>IV a</td>
<td>Tumor invades mucosa of bladder or rectum or extends beyond true pelvis</td>
</tr>
<tr>
<td>IV b</td>
<td>Spread to distant organs</td>
</tr>
</tbody>
</table>
Notes about staging

✔ The diagnosis of both stage 1A1 and 1A2 cases should be based on microscopic examination of removed tissues, preferably a cone; which must include the entire lesion. The depth of lesion should not be more than 5.0 mm taken from the base of the epithelium, either surface or glandular, from which it originates.

✔ The second dimension, the horizontal spread, must not exceed 7 mm. Vascular space involvement, either venous or lymphatic, should not alter staging but should be specifically recorded, as it may affect treatment decisions in the future.
As a rule, it is impossible to estimate clinically whether a cancer of the cervix has extended to the corpus or not. Extension to the corpus should therefore be disregarded.

A patient with a growth fixed to the pelvic wall by a short and indurated but not nodular parametrium should be allotted to stage IIIB. It is impossible, at clinical examination, to decide whether a smooth and indurated parametrium is truly cancerous or only inflammatory. Therefore, the case should be placed in stage III only if the parametrium is nodular on the pelvic wall or if the growth itself extends to the pelvic wall.
✔ In case of **doubt the lower stage is selected.** After a clinical stage is assigned and treatment has been initiated the stage must not be changed because of subsequent findings by either extended clinical staging or surgical staging.
The presence of bullous oedema should not permit a case to be allotted to stage IV. Ridges & furrows into bladder wall – submucous involvement of bladder if they remain fixed to growth at palpation during cystoscopy.

Malignant cytology of bladder washings need to be correlated with further examination & biopsy from bladder.
Prognosis of patients depends on……

✔ Early stage
  tumour size---- Depth of invasion
  lymphovascular invasion
✔ Advanced stage
  paraaortic & pelvic node
  Tumour size & extent of growth age

<table>
<thead>
<tr>
<th>size</th>
<th>Nodal mets</th>
<th>5 yr survival</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;3 cm</td>
<td>22 %</td>
<td>84 %</td>
</tr>
<tr>
<td>&gt;4 cm</td>
<td>36 %</td>
<td>66 %</td>
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<tr>
<td>Stage</td>
<td>Pelvic node %</td>
</tr>
<tr>
<td>-------</td>
<td>--------------</td>
</tr>
<tr>
<td>I</td>
<td>11-18</td>
</tr>
<tr>
<td>II</td>
<td>32-45</td>
</tr>
<tr>
<td>III</td>
<td>46-66</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>STAGE</th>
<th>Paraaortic node</th>
</tr>
</thead>
<tbody>
<tr>
<td>IB- IIA</td>
<td>0-18%</td>
</tr>
<tr>
<td>IIB</td>
<td>13-33%</td>
</tr>
<tr>
<td>III</td>
<td>46%</td>
</tr>
<tr>
<td>IVA</td>
<td>57%</td>
</tr>
</tbody>
</table>
Additional Radiology

- Tumour volume
- Disease extent-
  - nodal spread
  - parametrial &
  - pelvic wall
- involvement

- Lymphangiogram
- Ultrasound
- Computed tomograms
- Magnetic resonance imaging
- Positron emission tomogram
Primary group

✓ Parametrical
✓ Paracervical
✓ Obturator
✓ hypogastric / internal iliac
✓ External iliac
✓ Sacral

Secondary group

✓ Common iliac
✓ Paraaortic
✓ Inguinal
✓ Lymphatic trunks

- **3 lateral trunks**

  - **Upper**---terminates in high internal iliac nodes
    branches to ext iliac & common iliac interrupted by paracervical nodes
  
  - **Middle**---originates near cardinal lig
    -----obturator node
  
  - **Lower**---presacral, inf gluteal, lower paraaortic nodes

- **Anterior**---follows bladder lymphatics to internal iliac nodes

- **Posterior**----follows uterosacral lig
  ---sup rectal, presacral, common iliac
Lymphangiography

Interpretation of lymphangiogram based on examination of both – the lymphatic phase i.e. initial roentogram taken at completion of injection and the nodal phase – 24hr roentogram

Normal lymph node- has a granular pattern, oval or kidney shaped

Abnormal nodes- more rounded, may have a filling defect due to tumour deposition & irregularities along periphery of node
Bipedal lymphangiography used mainly to assess pelvic & paraaortic nodes

<table>
<thead>
<tr>
<th></th>
<th>sensitivity</th>
<th>specificity</th>
</tr>
</thead>
<tbody>
<tr>
<td>pelvic</td>
<td>28%</td>
<td>100%</td>
</tr>
<tr>
<td>paraaortic</td>
<td>79%</td>
<td></td>
</tr>
</tbody>
</table>

Even if nodes are not enlarged if architectural distortion+…….clue to metastasis– hence helpful in treatment planning

**Disadv**-
- peripheral group of nodes- hypogastric, obturator, ext iliac not visualised
- Small metastatic lesions may not distort architecture
- Sometimes gross metastatic tumour completely obliterate lymph nodes

Long term follow up Not possible
- Allergy to drug, time consuming & cumbersome
ULTRASOUND

✓ Ultrasound of abdomen & pelvis used to evaluate …..

  - tumour size
  - invasion of parametrium
  - pelvic side wall
  - bladder & rectal invasion
  - hydronephrotic changes
  - metastasis
  - lymph nodes (?)

TRANSABDOMINAL
TRANSVAGINAL
TRANSRECTAL
CT SCAN

✔ Value of CT scan in invasive Ca cervix -- assessment of advanced disease (stage > IIB) -- detection & biopsy of suspected lymph node metastasis -- radiation treatment planning --- contouring GTV, CTV, PTV, TV, IV
Magnetic Resonance Imaging

- Pelvic imaging like USG & CT scan – limited capability for tissue characterisation
- MRI superior soft tissue resolution-
- Most effective in evaluating:
  - tumour volume
  - endocervical lesions
  - local extension
  - lymph node status
  - monitoring therapeutic response
  - recurrent disease
MRI contd........

Preservation of stromal ring – noninvasive cervical ca

Disruption of stromal ring– reliable sign of parametrial invasion
PET SCAN

- PET --- functional test of glycolytic activity of tumour & relative deficiency of glucose 6 P in tumour cells
- MRI --- cannot image occult distant metastasis
- Whole body PET can detect these occult mets---

<table>
<thead>
<tr>
<th></th>
<th>sensitivity</th>
<th>specificity</th>
<th>accuracy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paraaortic</td>
<td>67 %</td>
<td>95%</td>
<td>88 %</td>
</tr>
<tr>
<td>pelvic</td>
<td>91 %</td>
<td>94%</td>
<td>92 %</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>sensitivity</th>
<th>Specificity</th>
</tr>
</thead>
<tbody>
<tr>
<td>PET</td>
<td>88 %</td>
<td>92 %</td>
</tr>
<tr>
<td>CT</td>
<td>72 %</td>
<td>93 %</td>
</tr>
<tr>
<td>MRI</td>
<td>50 %</td>
<td>95 %</td>
</tr>
<tr>
<td>PET.CT</td>
<td>72 %</td>
<td>92 %</td>
</tr>
</tbody>
</table>
TNM staging

Developed by Pierre Denoix 1943-1952 and 1st published in 1953

Endorsed by American Joint Committee on Cancer (AJCC)

- **Tumour size (T)** – primary tumour that has not been previously treated

- **Nodal involvement** - regional lymph nodes include paracervical, parametrial, hypogastric (obturator); common, internal and external iliac; presacral and sacral nodes. Metastasis to lymph nodes outside the regional nodal group is classified as distant metastasis

**Metastatic involvement** – excludes peritoneal metastasis
<table>
<thead>
<tr>
<th>Stage</th>
<th>T</th>
<th>N</th>
<th>M</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stage 0</td>
<td>Tis</td>
<td>No</td>
<td>M0</td>
</tr>
<tr>
<td>Stage IA</td>
<td>T1a</td>
<td>No</td>
<td>M0</td>
</tr>
<tr>
<td>Stage IA(_1)</td>
<td>T1a(_1)</td>
<td>No</td>
<td>M0</td>
</tr>
<tr>
<td>Stage IA(_2)</td>
<td>T1a(_2)</td>
<td>No</td>
<td>M0</td>
</tr>
<tr>
<td>Stage 1B</td>
<td>T1b</td>
<td>No</td>
<td>M0</td>
</tr>
<tr>
<td>Stage 1B(_1)</td>
<td>T1b(_1)</td>
<td>No</td>
<td>M0</td>
</tr>
<tr>
<td>Stage 1B(_2)</td>
<td>T1b(_1)</td>
<td>No</td>
<td>M0</td>
</tr>
<tr>
<td>Stage IIA</td>
<td>T2a</td>
<td>No</td>
<td>M0</td>
</tr>
<tr>
<td>Stage IIB</td>
<td>T2b</td>
<td>No</td>
<td>M0</td>
</tr>
<tr>
<td>Stage IIIA</td>
<td>T3a</td>
<td>No</td>
<td>M0</td>
</tr>
<tr>
<td>Stage IIIB</td>
<td>T1,T2,T3a,T3b</td>
<td>N1</td>
<td>M0</td>
</tr>
<tr>
<td>Stage IVA</td>
<td>T4</td>
<td>Any N</td>
<td>M0</td>
</tr>
<tr>
<td><strong>Stage IV B</strong></td>
<td>Any T</td>
<td>Any N</td>
<td><strong>M1</strong></td>
</tr>
</tbody>
</table>
Hence TNM staging helps in estimation of prognosis and also planning therapy.

Moreover TNM staging is a dual system:
- clinical
- pathological (pT, pN, pM)
  (postoperative histopathological)

This also allows quality assurance of clinical staging.
Management of cervical cancer is based on assessment of parametrial extension & nodal involvement

Radical hysterectomy – for medically fit Stage I patients or with minimal extension to proximal vagina (Stage IIA)
Radiation therapy for Stage IIB or greater

FIGO staging takes into account tumour size but still does not include lymph node metastasis

Errors of FIGO staging
- stage IB---17-32%
- stage II- IV--- 67%
24.3% patients of stage IIIB present with hydronephrosis. Excretory urography unnecessary when CT & MRI are used because of comparable accuracies of IVP, CT, MRI in detecting urinary obstruction.

CT evaluation not only imp for detecting locoregional extent but also for radiation treatment planning.
HENCE…..CT /MRI may be preferred as primary diagnostic modality in ca cx

However……sometimes overestimation of tumour size by MRI –19%

CT & MRI may prove to be beneficial in clinically staged early disease by early detection of nodal metastasis & parametrial invasion ----treatment plan may change

But in late/advanced staged disease

no change of treatment option

no benefit in overall survival
Moreover
- MRI costly, not universally available
- higher false positive rates of CT to detect parametrial invasion
- low diagnostic accuracy of CT 58% compared to clinical accuracy 92% in detecting parametrial invasion
- Lack of uniform quality in performing, interpreting CT & MRI

**FIGO staging is still clinical**

CT /MRI adds to diagnostic accuracy
Other investigations

HIV SCREENING – HIV1, HIV 2, HIV RNA, CD 4 counts

✓ TUMOUR ANTIGEN----SCC Ag

\[\uparrow 60 \% \text{ cases},\]

Persistent levels 3 – 12 mo after T/T---failure

TUMOUR MARKERS

CA125---- 21.5 %  Adenoca
CA19-9----32 %
CEA
PROG RECEPTORS  +  ----- \[\uparrow \text{DFS}\]
\[\downarrow \text{COX 2 LEVELS} \quad ----- \quad \text{better 5 yr survival}\]
c erb 2  ----  49 % adenoca
38 % SCC
Role of sentinel node scintigraphy

Sentinel node--- specific node that is 1st to receive drainage from malignancy & primary site for metastasis

✓ Presence or absence of metastatic disease in sentinel node reflects status of nodal basin as a whole

✓ Lymphatic mapping of cervix--- 2 possible drainage sites

✓ Sensitivity
65%-- 87%

✓ Presently purely inv

✓ Phase III trials with survival end points necessary to establish its definite diagnostic role in ca cervix
CONCLUSIONS

Carcinoma of cervix is the leading cause of gynaecological cancers in INDIA.

For invasive disease recommendations for diagnostic evaluation and treatment planning have evolved into 2 distinct processes---clinical staging & extended clinical staging.
Nodal metastasis & parametrial invasion are of paramount importance in treatment planning & prognosis.

For stage I & IIA disease MRI & CT owing to satisfactory accuracy in evaluation of main prognostic factors ensures correct treatment planning.

However, >85% of cases presenting to us are > stage III hence still today diagnostic work up in carcinoma cervix is primarily clinical based on FIGO guidelines.