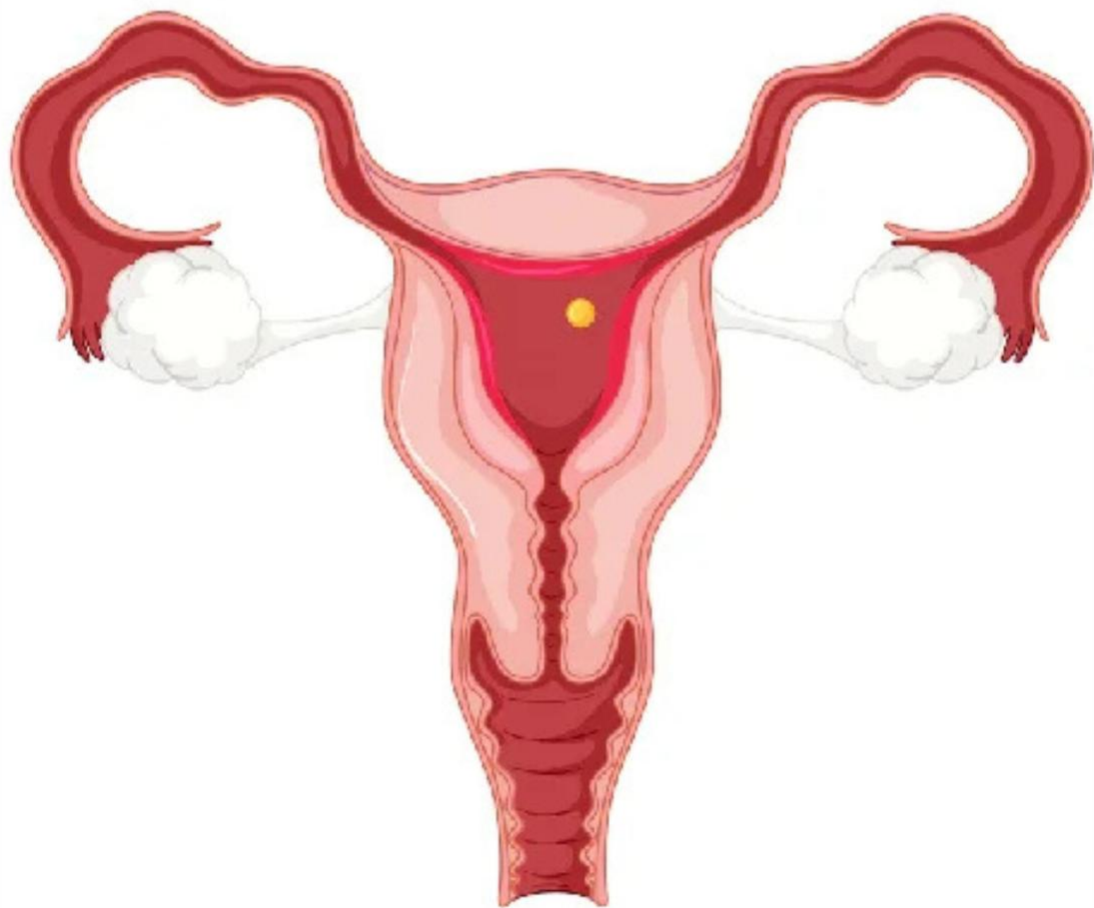


National Guideline for the Diagnosis and Treatment of Cervical Cancer 2026



Ministry of Health
Republic of Maldives



**World Health
Organization**

Maldives

Version Number	Version Date	Description of change
1	12th May 2026	Initial release

Document Number: MOH-QA/G/26/247-0

Principle Author:	Dr. Mohamed Amru Ahmed, Consultant in Clinical Oncology, MBBS, MD, IGM Hospital
Peer Reviewers:	Dr. Hawwa Hana, Senior Consultant in Obstetrics & Gynecology, IGM Hospital Dr. Shahula Afeef, Senior Consultant in Radiology, ADK Hospital Dr. Zahiya Abdul Baree, Consultant in Obstetrics & Gyneacology, ADK Hospital Dr. Inaya Abdul Raheem, Consultant in Obstetrics & Gyneacology, Treetop Hospital Dr. Dhunya Thaufeeq, Consultant in Radiology, Hulhumale' Hospital
Endorsed by:	Uza. Thasleema Usman Commissioner of Quality Assurance
Published by:	Ministry of Health, Maldives

Table of Contents

1. Introduction.....	5
2. Scope	5
2.1 Application Setting	5
2.2 Scope of the Guideline.....	6
2.3 Guiding Principles.....	6
2.4 Implementation Framework.....	6
3. Risk Factors	7
3.1 Infectious Factors	7
3.2 Behavioural Factors	7
3.3 Hormonal, Nutritional and Genetic Factors	7
4. Signs and Symptoms	8
4.1 Early Disease.....	8
4.2 Advanced Disease	8
5. Physical Examination.....	8
5.1 Key Examinations	8
6. Differential Diagnosis	9
7. Investigations	9
7.1 Histopathological Diagnosis.....	9
7.2 Laboratory Investigations.....	9
7.3 Radiological Evaluation	10
7.4 Surgical Staging	10
7.5 Immunohistochemistry and Molecular Profiling.....	10
8. Classification and Staging	11
9. Multidisciplinary Evaluation	11
9.1 Imaging Guidance by Stage	11
10. Management of Cervical Cancer.....	12
10.1 Management of Local and Locoregional Disease	12
10.2 Fertility-Sparing Treatment	12
10.3 Non-Fertility-Sparing Treatment	13
10.4 Chemotherapy in Early-Stage Cervical Cancer	13
10.5 Recommended Chemotherapy Regimens.....	14
10.6 Management of Locally Advanced Cervical Cancer	14
10.7 Management of Advanced, Recurrent, or Metastatic Disease	15
11. Principles of Radiotherapy.....	17

11.1 Types of Radiotherapy	17
11.2 Concurrent Chemotherapy.....	17
11.3 Adjuvant Radiotherapy	17
12. Follow-Up and Post-Treatment Surveillance	18
12.1 Follow-Up Schedule	18
12.2 Components of Each Visit.....	18
13. Survivorship Care.....	18
13.1 Late Effects of Therapy	19
14. Cervical Cancer During Pregnancy	19
14.1 Multidisciplinary Approach.....	19
14.2 Diagnosis	19
14.3 Treatment Principles by Gestation	19
15. Clinical Reference Pathways.....	20
15.1 Screening and Asymptomatic Women.....	20
15.2 Symptomatic Pathway (Women with Abnormal Bleeding or Discharge)	20
15.3 Precancer Management Pathway	20
15.4 Cancer Management Pathway	21
15.5 Follow-Up and Surveillance Pathway	21
15.6 Referral Pathways (Proposed Hierarchy).....	21
15.7 Summary of Patient Pathway.....	21
16. References.....	22

1. Introduction

Cervical cancer remains a major public health challenge and is the fourth most common cancer in women globally, both in incidence and mortality. In 2022, approximately 660,000 new cases and 350,000 deaths were reported worldwide (Bray et al., 2024). The burden of disease largely reflects disparities in access to effective screening, early treatment, and vaccination programmes.

According to the WHO GLOBOCAN 2022 data, cervical cancer ranked as the second most common cancer among women in the Maldives. Current national estimates indicate that each year around 51 women are diagnosed with cervical cancer and 26 die from the disease (Globocan, 2022). It is the second leading cancer among Maldivian women aged 15–44 years (ICO/IARC HPV Fact Sheet, 2023).

The National HPV Immunisation Programme, initiated in 2019, offers protection to girls aged 10-14 years. In 2021, HPV vaccination coverage reached 60% for the first dose and 41% for the second among those vaccinated under the national programme. Cervical cancer is largely preventable through HPV vaccination, regular screening and early management of pre-cancerous lesions. Variations in incidence among regions primarily reflect differences in HPV prevalence, screening programmes, and access to healthcare services.

2. Scope

These guidelines provide evidence-based recommendations for the diagnosis, evaluation and management of cervical cancer within the Maldivian healthcare system. The aim is to inform clinicians, policymakers, and allied health professionals involved in cervical cancer care.

Although local data on epidemiology, cancer outcomes and treatment patterns remain limited—owing to the absence of a national cancer registry or population-based studies—most recommendations here are adapted from internationally recognised guidelines, contextualised for the Maldives. These include guidance from the National Comprehensive Cancer Network (NCCN, 2024), the European Society for Medical Oncology (ESMO, 2019) and the European Society of Gynaecological Oncology (ESGO, 2024), the American Cancer Society (ACS), and the International Federation of Gynecology and Obstetrics (FIGO, 2018).

2.1 Application Setting

These guidelines apply to tertiary-level hospitals and oncology centres. They may be adapted by regional facilities as referral networks and structured cancer care pathways develop further across the Maldives.

2.2 Scope of the Guideline

2.2.1 Covered Areas

- Diagnostic evaluation and staging of cervical cancer.
- Stage-wise management (surgical, medical and radiotherapeutic).
- Follow-up, surveillance and survivorship care.
- Referral pathways aligned with evolving national referral structures.

2.2.2 Excluded Areas

- HPV vaccination and cervical cancer prevention strategies.
- Cervical cancer screening guidelines (addressed separately under the national screening programme).
- Management of cervical intraepithelial neoplasia (CIN) and carcinoma in situ.
- Cost-effectiveness analyses and resource allocation strategies.
- Experimental therapies and ongoing clinical trials.

2.3 Guiding Principles

- Evidence-based: Aligned with global standards from NCCN, ESMO/ESGO, ACS, and FIGO.
- Context-appropriate: Adapted to Maldivian healthcare resources and existing referral structures.
- Multidisciplinary: Encourages tumour-board discussions and cross-specialty collaboration in complex cases.
- Ethical and patient-centred: Upholds principles of informed consent, equity, and quality care.

2.4 Implementation Framework

The guideline will gain increasing relevance as the national cancer control system, including formal referral networks and a national cancer registry, becomes operational. A simplified clinical flow-chart—from primary to tertiary levels of care—will support uniform management once integrated health-information systems are in place.

For cases already confirmed through screening or biopsy, clinicians should refer to this guideline for staging and management. Screening and primary prevention remain governed by national cervical cancer screening recommendations.

3. Risk Factors

Cervical cancer develops primarily due to persistent infection with high-risk types of human papillomavirus (HPV). Around 99% of cervical cancers are HPV-associated, with subtypes 16 and 18 accounting for approximately 70% of all cases (NCCN, 2024).

Risk factors can be grouped for clarity:

3.1 Infectious Factors

- Persistent infection with high-risk HPV (especially types 16, 18, 31, 33, 45, 52 and 58).
- Co-infection with HIV, Herpes simplex virus (HSV), Chlamydia trachomatis, and Trichomonas vaginalis increases susceptibility.
- Immunosuppression (e.g., HIV/AIDS or long-term immunosuppressive therapy) heightens the risk of HPV persistence.

3.2 Behavioural Factors

- Multiple sexual partners or a partner with multiple partners.
- Early onset of sexual activity (before 18 years).
- High parity (more than five births).
- Tobacco smoking, which doubles the risk of squamous cell carcinoma.
- Prolonged oral contraceptive use (more than five years).
- Low socio-economic status, which often correlates with limited screening access.
- Substance use contributing to high-risk sexual behaviour.

3.3 Hormonal, Nutritional and Genetic Factors

- Nutritional deficiencies (e.g., vitamins A, C, E, or folate).
- Genetic predisposition — particularly variants influencing immune response and viral clearance.
- Early age at first childbirth (< 18 years) and short inter-pregnancy intervals.

4. Signs and Symptoms

4.1 Early Disease

Early-stage cervical cancer often remains asymptomatic. When present, symptoms may include:

- Unusual vaginal discharge, often watery or malodorous.
- Post-coital bleeding.
- Inter-menstrual or post-menopausal bleeding.

Any woman with abnormal vaginal bleeding or discharge should undergo a speculum examination, regardless of apparent cervical normality. Cervical cytology or HPV testing is mandatory where indicated.

4.2 Advanced Disease

As cancer progresses, symptoms may include:

- Pelvic or lower abdominal pain.
- Back or leg pain.
- Weight loss and fatigue.
- Urinary symptoms: frequency, urgency, reduced output, or haematuria.
- Gastrointestinal symptoms: constipation, diarrhoea, or faecaluria in advanced invasion.
- Lower limb oedema due to lymphatic obstruction.
- Dyspnoea from pulmonary metastasis.

5. Physical Examination

A thorough clinical evaluation is essential for diagnosis, staging, and treatment planning.

5.1 Key Examinations

- Speculum examination: Inspect for visible lesions, ulcerations, bleeding, or suspicious growths.
- Bimanual pelvic examination: Assess cervical mobility, size, and local infiltration.
- Rectovaginal examination: Evaluate parametrial thickening or fixation, rectal mucosal invasion, and pelvic wall extension.
- General examination: Check for lymphadenopathy, abdominal distension, and supraclavicular nodal enlargement.

Findings from the pelvic examination should prompt further investigation using biopsy, colposcopy, and imaging where indicated.

6. Differential Diagnosis

Because abnormal bleeding and discharge are non-specific, differential diagnoses include:

- Infective causes: Cervicitis (gonorrhoea, chlamydia, trichomoniasis), pelvic inflammatory disease, vaginitis (bacterial vaginosis, candidiasis).
- Benign gynecologic conditions: Cervical ectropion, cervical polyps, submucosal fibroids, endometrial hyperplasia.
- Premalignant lesions: Cervical intraepithelial neoplasia (CIN I–III).
- Malignant causes: Vaginal carcinoma, endometrial carcinoma, ovarian tumours.
- Non-gynecologic causes: Hormonal imbalance (perimenopausal or anovulatory cycles), traumatic causes (post-coital, iatrogenic), or device-related irritation (e.g., IUCD).

7. Investigations

A systematic diagnostic work-up is essential to confirm histology, determine disease extent, and plan stage-appropriate management. All women suspected of having cervical cancer should undergo the following investigations.

7.1 Histopathological Diagnosis

- Cervical biopsy (directed or excisional) for histopathology and immunohistochemistry.
- Colposcopy-directed biopsy if the lesion is not macroscopically visible.
- If biopsy is inadequate to determine invasiveness, perform an excisional cone biopsy (Lee & Atri, 2019).
- Histological classification should conform to the World Health Organization (WHO) framework, categorising epithelial tumours as:
 - Squamous cell carcinoma (\approx 70–80%),
 - Adenocarcinoma (\sim 15–20%),
 - Adenosquamous, neuroendocrine or undifferentiated variants (\sim 5%) (IARC, n.d.).

7.2 Laboratory Investigations

- HPV DNA testing (preferably genotyping for types 16 and 18).
- HIV screening.
- Full blood count, renal and liver profiles before chemotherapy or radiotherapy.

7.3 Radiological Evaluation

Imaging defines local tumour dimensions, parametrial spread, nodal involvement, and distant metastases.

Modality	Purpose	Notes
MRI (pelvis, with/without contrast)	Tumour size, stromal invasion, vaginal and parametrial spread	Preferred modality for loco-regional assessment
CT / PET-CT	Nodal and distant metastases	PET-CT has higher specificity for node and distant detection (Choi et al., 2010)
Ultrasound (transvaginal or transabdominal)	Initial evaluation of pelvic mass	May support resource-limited settings
Cystoscopy / Proctoscopy / Hysteroscopy	If invasion into bladder, urethra, or rectum suspected	Perform only if results will alter staging or management

7.4 Surgical Staging

When clinically indicated, surgical lymph node assessment may refine decisions on adjuvant therapy. Pathologic analysis should document:

- Tumour dimensions.
- Depth of stromal invasion.
- Lymphovascular space invasion (LVSI).
- Nodal involvement.
- Histological subtype and grade.

7.5 Immunohistochemistry and Molecular Profiling

Where feasible, additional molecular tests (e.g., p16 INK4a over-expression, PD-L1 status) may aid in diagnostic clarification and therapeutic decision-making in recurrent or metastatic disease.

8. Classification and Staging

Cervical cancer staging follows the FIGO 2018 system, which integrates clinical and imaging information (Salib et al., 2020; Lee & Atri, 2019). Multidisciplinary review is strongly recommended.

Stage	Description
I	Carcinoma confined to cervix (uterine corpus involvement disregarded).
IA	Microinvasive cancer diagnosed microscopically, depth < 5 mm.
IA1	Stromal invasion ≤ 3 mm.
IA2	Stromal invasion > 3 mm and ≤ 5 mm.
IB	Invasive carcinoma > 5 mm depth, limited to cervix.
IB1	> 5 mm invasion and ≤ 2 cm diameter.
IB2	> 2 cm and ≤ 4 cm diameter.
IB3	> 4 cm diameter.
II	Tumour invades beyond uterus but not lower third of vagina or pelvic wall.
IIA	Limited to upper two-thirds of vagina, no parametrial involvement.
IIA1	≤ 4 cm.
IIA2	> 4 cm.
IIB	Parametrial involvement but not to pelvic wall.
III	Involves lower third of vagina and/or extends to pelvic wall and/or causes hydronephrosis/non-functioning kidney and/or pelvic/para-aortic node involvement.
IIIA	Involves lower third of vagina, no pelvic wall extension.
IIIB–IIIC– IVA–IVB	Follow FIGO 2018 definitions for pelvic wall, bladder/rectal mucosa, or distant spread.

9. Multidisciplinary Evaluation

All cases beyond micro-invasive disease (stage IA2 and above) should undergo review at a multidisciplinary tumour board. Centres lacking a full team are encouraged to collaborate through remote or shared boards at tertiary referral centres.

9.1 Imaging Guidance by Stage

- Stage IA2 – IB2: MRI ± clinical staging for tumour size and invasion; CT with contrast for lymph-node/distant metastasis.
- Stage IB3 – IVA: Whole-body FDG-PET/CT to evaluate pelvic and para-aortic nodes and distant disease prior to chemoradiation.

Early identification of nodal disease is critical, as it directly influences the choice between surgery and definitive chemoradiation.

10. Management of Cervical Cancer

Management of cervical cancer depends primarily on the stage of disease, the patient's fertility wishes, performance status, and resource availability. Treatment decisions should be made within a multidisciplinary framework, ideally through a tumour board, incorporating surgical, medical, radiation oncology, pathology, and radiology expertise (NCCN 2024; ESMO/ESGO 2019).

10.1 Management of Local and Locoregional Disease

The following applies to squamous cell carcinoma, adenocarcinoma, and adenosquamous carcinoma.

Primary Treatment (Early-Stage Disease)

Early stage includes FIGO Stages IA–IB2. Surgery is preferred over primary radiation therapy where feasible.

10.2 Fertility-Sparing Treatment

Fertility preservation may be considered in young women with stage IA1–IB1 disease, provided no lymphovascular invasion and all margins are negative.

Stage	Fertility-Sparing Approach	Notes
IA1 (no LVSI)	Conization if margins negative.	Low risk of lymphatic spread; follow-up only.
IA1 (+ LVSI)	Cone biopsy or radical trachelectomy + pelvic lymphadenectomy (± sentinel node mapping).	Repeat cone or trachelectomy if margins positive.
IA2–IB1 (no LVSI)	Extrafascial hysterectomy + pelvic lymphadenectomy (± SLN mapping).	Preserves ovarian function if needed.
IA2–IB1 (≤ 2 cm, no LVSI)	Radical trachelectomy + pelvic lymphadenectomy (consider SLN mapping).	Ideal for fertility-sparing intent; ensure negative margins.
IB1 or selected IB2 (≤ 2 cm)	Radical trachelectomy ± para-aortic node sampling.	Case-by-case assessment required.

If intermediate- or high-risk features (see below) are identified in the specimen, concurrent chemoradiation should follow surgery (Pecorelli 2009; Querleu & Morrow 2008).

10.3 Non-Fertility-Sparing Treatment

Stage	Primary Treatment
IA1 (no LVSI)	Observation if margins negative; otherwise extrafascial/modified radical hysterectomy + pelvic lymphadenectomy (± SLN mapping) or brachytherapy).
IA1–IA2 (with LVSI)	Modified radical hysterectomy + pelvic lymphadenectomy or pelvic EBR T + brachytherapy.
IA2–IB1	Extrafascial/modified radical hysterectomy + pelvic lymphadenectomy (± SLN mapping).
IB1 (LVSI +) / IB2 / IIA1	Radical hysterectomy + pelvic ± para-aortic lymphadenectomy or pelvic EBRT + brachytherapy ± platinum chemotherapy.

10.4 Chemotherapy in Early-Stage Cervical Cancer

Chemotherapy may be administered:

- Neoadjuvantly, to reduce tumour volume before surgery; or
- Adjuvantly, for patients with intermediate- or high-risk features after surgery.

Defining Risk (Sedlis Criteria)

The Sedlis criteria identify patients who may benefit from adjuvant radiation after radical hysterectomy when margins and nodes are negative but recurrence risk is intermediate (Sedlis et al., 1999).

Recommended Adjuvant Therapy

- Intermediate-risk: Adjuvant radiotherapy.

Risk Category	Pathological Findings
Intermediate risk	a) LVSI + deep 1/3 stromal invasion ² + tumour < 4 cm b) LVSI + middle 1/3 invasion + tumour > 2 cm c) LVSI + superficial 1/3 invasion + tumour > 5 cm d) No LVSI but deep/middle 1/3 invasion + tumour > 4 cm.
High risk	a) Positive surgical margins b) Positive pelvic lymph nodes c) Microscopic parametrial involvement.

- High-risk: Concurrent chemoradiation (CCRT).

Preferred radiosensitiser: single-agent Cisplatin 40mg/m² weekly. Alternative: Carboplatin AUC 2 weekly, particularly in renal impairment.

10.5 Recommended Chemotherapy Regimens

Setting / Histology	Preferred Regimen	Alternative / Special Notes
Concurrent chemo-RT (standard SCC/adenocarcinoma)	Cisplatin 40 mg/m ² weekly × 6 weeks during radiation.	Carboplatin AUC 2 weekly (if renal insufficiency).
Small cell (neuroendocrine)	Cisplatin + Etoposide (EP) every 3 weeks × 4–6 cycles.	Consider combination with radiation in limited disease.
Neoadjuvant therapy (before surgery)	Paclitaxel + Cisplatin × 3 cycles.	Optionally add Bevacizumab if available and feasible.
High-risk adjuvant (post-operative)	Cisplatin 40 mg/m ² weekly with radiation.	Carboplatin can replace cisplatin in renal dysfunction.

10.6 Management of Locally Advanced Cervical Cancer

Defined as FIGO Stage IB3 to IVA, this group represents the majority of new cases in developing regions. Treatment is definitive chemoradiation, integrating external beam radiotherapy (EBRT) and intracavitary brachytherapy.

10.6.1 Pre-Treatment Evaluation

A PET/CT or contrast CT should be performed to assess para-aortic nodes and distant disease (Olawaiye et al., 2021).

Each patient should have renal function assessed before cisplatin administration.

10.6.2 Primary Treatment Options

- EBRT + Concurrent Cisplatin Chemotherapy + Brachytherapy (definitive combined-modality).
- Extended-field EBRT if para-aortic nodes are positive (confirmed radiologically or pathologically).
- Surgical lymph-node dissection may be considered in selected operable cases before radiation.

If para-aortic nodes are positive, deliver extended-field radiation with concurrent platinum followed by brachytherapy. Potential toxicities must be clearly discussed with patients before treatment.

10.6.3 Concurrent Chemoradiation (CCRT)

Concurrent chemoradiation remains the gold standard for locally advanced cervical cancer, improving both DFS and OS compared with RT alone (NCCN 2024).

Drug	Dose and Schedule
Cisplatin	40 mg/m ² IV weekly × 6 weeks during radiotherapy
Carboplatin	AUC 2 weekly (if Cisplatin contraindicated)
Optional Addition	Pembrolizumab (under trial evidence) for persistent PD-L1 positive disease

10.7 Management of Advanced, Recurrent, or Metastatic Disease

Recurrent cervical cancer can be central (pelvic) or distant. Management depends on prior treatment, recurrence site, and patient condition.

10.7.1 Work-Up

- Confirm recurrence with biopsy.
- Perform PET/CT to evaluate extent.
- Re-assess performance status and organ function.

10.7.2 Management Options

Setting	Treatment Options
Local/Regional recurrence (no prior RT)	Surgical resection ± EBRT + platinum chemotherapy ± brachytherapy.
Central recurrence (after RT)	Pelvic exenteration ± intra-operative RT or hysterectomy (if feasible).
Non-central recurrence (after RT)	Individualised EBRT ± CT or palliative systemic therapy.
Distant metastasis (amenable to local treatment)	Local resection ± EBRT or ablative therapy ± systemic chemotherapy.
Distant non-resectable	Systemic therapy and/or best supportive care.

10.7.3 Systemic Therapy (Palliative Setting)

Palliative chemotherapy improves symptom control and quality of life when performance status < 2 and contraindications absent.

Line	Preferred Regimens	Rationale / Notes
First-line	Paclitaxel + Cisplatin + Bevacizumab (q3 weeks).	Demonstrated improved OS and PFS vs Cisplatin alone.
	Paclitaxel + Carboplatin	For Cisplatin ineligible patients.
Second-line / Refractory	Topotecan + Cisplatin; or Paclitaxel + Topotecan ± Bevacizumab.	Choose based on availability and tolerability.
Immunotherapy (if available)	Pembrolizumab for PD-L1 positive recurrent or metastatic disease.	Based on KEYNOTE-826 trial evidence.

10.7.4 Palliative Radiotherapy & Symptom Management

- Short-course radiotherapy for bleeding, fetid discharge, or pain (e.g., 8 Gy × 1 or 20 Gy × 5).
- Spinal cord compression → neurosurgical assessment ± short-course radiotherapy (30 Gy / 10 fractions).
- Fistula management: Individualised; consider catheter drainage or referral for repair; otherwise provide palliative care.

Best supportive care must address the physical, psychological, social, and spiritual well-being of both patients and families.

11. Principles of Radiotherapy

Radiotherapy (RT) is central to the management of locally advanced and high-risk cervical cancer. It is delivered either alone, concurrently with chemotherapy (CCRT), or as adjuvant therapy following surgery. Completion of radiotherapy within seven weeks is critical to avoid tumour repopulation and treatment failure (ESGO 2024).

11.1 Types of Radiotherapy

Type	Description and Purpose
External Beam Radiotherapy (EBRT)	Delivers radiation to the pelvis to treat the primary tumour and regional lymphatic drainage areas. Usually 45–50.4 Gy in 1.8 Gy fractions.
Brachytherapy (BT)	Intracavitary or interstitial radiation allows high doses to the primary tumour while sparing adjacent organs. Administered as high-dose-rate (HDR) or pulse-dose-rate (PDR) in several fractions.
External Beam Radiotherapy plus Brachytherapy Combined	Total treatment (EBRT + BT) should conclude within seven weeks to maximize local control.
Extended-Field Radiation	For confirmed para-aortic lymph node involvement. Requires meticulous planning to limit bowel and marrow toxicity.

Treatment Planning:

- Imaging (preferably MRI) should guide tumour- and organ-at-risk contouring.
- 3D conformal RT or intensity-modulated RT (IMRT) is preferred over conventional approaches for optimal dose distribution.

11.2 Concurrent Chemotherapy

- Preferred Radiosensitiser: Cisplatin 40 mg/m² weekly × 6 weeks.
- Alternative: Carboplatin AUC 2 weekly – used when cisplatin is contraindicated (renal dysfunction, poor tolerance).
- Alternative adjuncts: Hyperthermia or immunotherapy (where available) may be considered for selected refractory or recurrent cases.

11.3 Adjuvant Radiotherapy

Post-hysterectomy RT is recommended for patients with intermediate- or high-risk factors. Radiation fields and doses should mirror those applied in definitive chemoradiation, ensuring adequate coverage of parametrial and nodal regions.

12. Follow-Up and Post-Treatment Surveillance

Survivorship and follow-up form an essential part of comprehensive cancer care. The goals are to detect recurrence early, monitor for complications, and optimise quality of life.

12.1 Follow-Up Schedule

Timeline	Frequency of Visits	Assessments
0 – 2 years post-treatment	Every 3–6 months	History, pelvic/rectal exam, assessment of side effects.
Years 3 – 5	Every 4–12 months	Clinical appraisal, cytology if indicated, counselling.
> 5 years disease-free	Annually	Physical and pelvic examination per population guidelines.

12.2 Components of Each Visit

- Comprehensive examination: Abdominal, pelvic, and rectovaginal assessment.
- Symptom-based imaging: MRI of pelvis 3 months post-treatment (if available); CT or PET-CT based on clinical suspicion.
- Laboratory tests: Perform only if clinically indicated.
- Cytology/HPV co-testing: Annually after fertility-sparing surgery or when vaginal vault dysplasia suspected.
- Biopsy and imaging: If recurrence suspected clinically.
- Hormone replacement therapy (HRT): Consider for treatment-induced menopause, after risk assessment, with bone monitoring.

13. Survivorship Care

A multidisciplinary follow-up model is recommended, involving:

- Oncologists, gynaecologists, primary care physicians, nurses, psychologists, sexologists, physiotherapists and social workers.
- Regular assessment for long-term complications such as sexual dysfunction, lymphedema, urinary or bowel symptoms, and menopause-related changes.
- Lifestyle counselling on physical activity, smoking cessation, nutrition, and weight management.

13.1 Late Effects of Therapy

Common late sequelae include radiation proctitis, cystitis, premature menopause, pelvic fibrosis, and psychosocial distress. Early referral to appropriate supportive or rehabilitative services is crucial.

14. Cervical Cancer During Pregnancy

Cervical cancer occurring in pregnancy is rare but clinically challenging. Management must protect both maternal and fetal well-being, guided by a multidisciplinary team (NCCN 2024).

14.1 Multidisciplinary Approach

Care should involve obstetricians, gynaecologic oncologists, radiologists, neonatologists, pathologists, anaesthetists, and counsellors. Management plans should align with the patient's values, disease stage, and gestational age.

14.2 Diagnosis

- Pelvic examination and cervical biopsy are safe during pregnancy.
- Endocervical curettage should be avoided.
- Pelvic MRI (without gadolinium) or expert ultrasound is recommended for staging.
- PET-CT and CT abdomen/pelvis are contraindicated due to radiation exposure.

14.3 Treatment Principles by Gestation

Gestational Age	Recommended Approach	Remarks
Early pregnancy (< 20 weeks)	Initiate treatment immediately. Surgery or chemoradiation as per disease stage.	Chemoradiation typically leads to spontaneous miscarriage.
Late second trimester (> 20 weeks)	Delay treatment for selected stage IA2–IB2 cases; plan classical caesarean section + radical hysterectomy around 34 weeks.	Delayed therapy does not adversely affect prognosis in these stages.
Advanced disease	Discuss prognosis thoroughly; if delay necessary, neoadjuvant chemotherapy (Paclitaxel + Carboplatin) may be given to prevent progression.	Requires close fetal monitoring.

Delivery should occur at a tertiary centre with neonatal intensive-care capability. In all cases, management decisions must be individualised and documented after multidisciplinary consensus and patient consent.

15. Clinical Reference Pathways

These reference pathways are designed to facilitate consistent management of women across primary, secondary, and tertiary levels of healthcare in the Maldives. They represent simplified summaries of optimal clinical workflows, complementing the detailed management recommendations described earlier.

15.1 Screening and Asymptomatic Women

(Refer to the National Cervical Cancer Screening Guideline for details.)

- Women within the national screening age range should undergo HPV testing and/or Pap smear as per national recommendations.
- Abnormal results → Refer to colposcopy clinic.
- Lesions diagnosed as CIN 2+ or invasive disease → manage according to this guideline.
- Women with normal results → routine recall for repeat screening per national interval.

15.2 Symptomatic Pathway (Women with Abnormal Bleeding or Discharge)

Presentation: Post-coital, intermenstrual, or post-menopausal bleeding, or persistent foul-smelling vaginal discharge.

Clinical Flow

Confirmed histological diagnosis of cancer → Proceed to staging and management.

15.3 Precancer Management Pathway

Histological Result	Recommended Management	Follow-Up
CIN 1 (LSIL)	Observation, repeat cytology ± HPV testing at 12 months.	If normal twice → return to 3-yearly screening.
CIN 2 or CIN 3 (HSIL)	Excisional treatment (LEEP or cold-knife cone).	HPV + cytology co-test at 12 & 24 months.
Adenocarcinoma in situ	Excision or hysterectomy (if fertility not desired).	12- & 24-month co-test; then 3-yearly if negative.
Any grade with positive margins	Repeat excision or referral for specialist review.	—

Persistent abnormal results after adequate treatment → discuss at tumour board or refer to an oncology centre.

15.4 Cancer Management Pathway

Confirmed Invasive Cervical Cancer (Histologically Proven)

15.5 Follow-Up and Surveillance Pathway

At each visit:

- Comprehensive history and pelvic-rectal exam.
- Imaging if recurrence suspected.
- Cytology or HPV test annually after fertility-sparing therapy.
- Symptom management and counselling.
- Reinforce lifestyle advice — exercise, smoking cessation, nutrition.

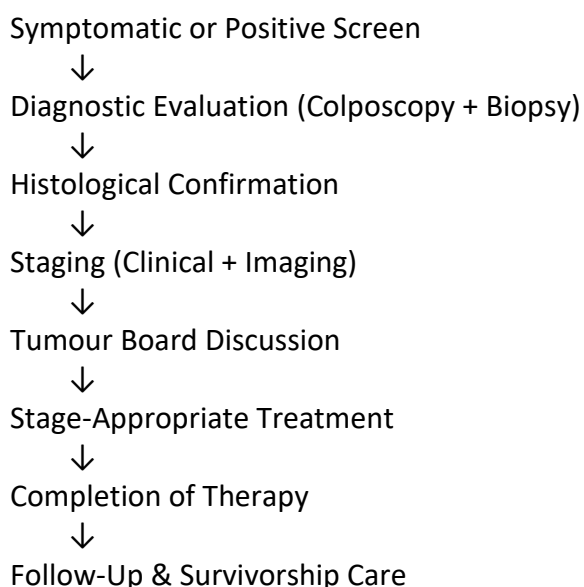
If recurrence or new symptoms:

→ Immediate re-evaluation + tumour board discussion for further management.

15.6 Referral Pathways (Proposed Hierarchy)

Level of Care	Role / Responsibilities	Referral Link
Primary Health Centre	Identify symptomatic women and screen asymptomatic clients.	Refer to secondary centres for colposcopy/biopsy.
Secondary Hospital	Perform colposcopy, biopsies, and initial work-up.	Refer confirmed cases to tertiary oncology centres.
Tertiary Oncology Centre /	Provide multidisciplinary evaluation, definitive treatment, and follow-up care.	Report case data to the national cancer registry.

15.7 Summary of Patient Pathway



16. References

American Cancer Society (ACS) (2023) *Cervical Cancer*. Available at: [cancer.org](https://www.cancer.org) (Accessed 2 June 2024).

Bray, F., Laversanne, M., Sung, H., Ferlay, J., Siegel, R. L., Soerjomataram, I. and Jemal, A. (2024) 'Global cancer statistics 2022: GLOBOCAN estimates of incidence and mortality worldwide for 36 cancers in 185 countries', *CA: A Cancer Journal for Clinicians*, 74(3), pp. 229-263. doi.org

Choi, H. J., Ju, W., Myung, S. K. and Kim, Y. (2010) 'Diagnostic performance of CT, MR and PET/CT for detection of metastatic lymph nodes in patients with cervical cancer: a meta-analysis', *Cancer Science*, 101(6), pp. 1471-1479.

European Society for Medical Oncology (ESMO) (2019) *Clinical Practice Guidelines: Cervical Cancer*. *Annals of Oncology*. Available at: annalsofoncology.org

European Society of Gynaecological Oncology (ESGO) (2024) *ESGO Guidelines for Management of Cervical Cancer*, European Society of Gynaecological Oncology, Brussels.

Fanning, J. and Padratzick, J. (2002) 'Cold knife conization vs LEEP — are they the same procedure?', *Journal of Reproductive Medicine*, 47, pp. 33-35.

Globocan WHO (2022) *Maldives – Fact Sheet*. International Agency for Research on Cancer (IARC). Available at: gco.iarc.who.int

Hodgson, A., Park, K. J., Djordjevic, B. and others (2019) 'International Endocervical Adenocarcinoma Criteria and Classification: Validation and Interobserver Reproducibility', *American Journal of Surgical Pathology*, 43, pp. 75-83.

ICO/IARC HPV Information Centre (2023) *HPV and Related Cancers, Maldives Fact Sheet 2023*. Available at: hpvcentre.net

International Agency for Research on Cancer (IARC) (n.d.) *WHO Classification of Tumours of the Uterine Cervix*. Available at: screening.iarc.fr (Accessed 2 June 2024).

Lee, S. and Atri, M. (2019) '2018 FIGO staging system for uterine cervical cancer: enter cross-sectional imaging', *Radiology*, 292, pp. 15-24.

National Comprehensive Cancer Network (NCCN) (2024) *NCCN Guidelines® Insights: Cervical Cancer, Version 1.2024*, *Journal of the National Comprehensive Cancer Network*, 21(12), pp. 1224-1236. Available at: [nccn.org](https://www.nccn.org)

Olawaiye, A. B., Baker, T. P., Washington, M. K. and Mutch, D. G. (2021) 'The new (Version 9) AJCC TNM staging for cervical cancer', *CA: A Cancer Journal for Clinicians*, 71(4), pp. 287-290.

Pecorelli, S. (2009) 'Revised FIGO staging for carcinoma of the vulva, cervix, and endometrium', *International Journal of Gynecology & Obstetrics*, 105, pp. 103-104.

Querleu, D. and Morrow, C. P. (2008) 'Classification of radical hysterectomy', *The Lancet Oncology*, 9, pp. 297-303.

Salib, M. Y., Russell, J. A., Stewart, V., Sudderuddin, S., Bharwani, N., Sahdev, A. and Rockall, A. G. (2020) '2018 FIGO staging classification for cervical cancer: added benefits of imaging', *Radiographics*, 40(7), pp. 1910-1922.

Schmeler, K. M., Pareja, R., Lopez Blanco, A. et al. (2021) 'ConCerv: a prospective trial of conservative surgery for low-risk early-stage cervical cancer', *International Journal of Gynecological Cancer*, 31, pp. 1317-1325.

Simmons, J. R., Anderson, L., Hernandez, E. and Heller, P. B. (1998) 'Evaluating cervical neoplasia: LEEP as an alternative to cold knife conization', *Journal of Reproductive Medicine*, 43, pp. 1007-1013.