Anal canal cancer is a rare cancer both world-wide and in the Kingdom of Saudi Arabia (KSA). In 2010, a total of only 27 cases were diagnosed in KSA, 18 males and 9 females representing 0.3% of all cases diagnosed in the Saudi population.\(^1\) The age standardized rate was 0.3/100,000 for males and 0.2/100,000 for females.

The evidence adopted in these guidelines is rated at 3 levels: 1) Evidence level (EL)-1 (highest level) evidence from phase III randomized trials or meta-analyses; 2) EL-2 (intermediate-level) evidence from good phase II trials or phase III trials with limitations; and 3) EL-3 (low-level) from retrospective or observational data and/or expert opinion. This easy-to-follow grading system is convenient for the reader and allows accurate assessment of the applicability of the guidelines in individual patients.\(^2\)

All cases of anal canal cancer should preferably be seen or discussed in a multidisciplinary form.

1. **Pre-treatment evaluation**
   1.1 History and clinical examination including inguinal lymph node palpation and rigid anoscopy
   1.2 Blood count, liver, and renal function levels
   1.3 Chest x-ray
   1.4 Computed tomography (CT) scan of abdomen and pelvis
   1.5 Magnetic resonance imaging (MRI) of pelvis
   1.6 Fine needle aspiration of inguinal lymph nodes if clinically palpable
   1.7 Human immunodeficiency virus testing in selected cases

2. **Staging**
   The American Joint Commission on Cancer (AJCC)- 2007 pathological staging system will be used.\(^3\)

3. **Treatment**
   3.1 Localized disease (clinical stage T1-4, N0-1). Concurrent chemoradiotherapy\(^4\) (EL-2)
   3.1.1 Chemotherapy: 5-fluorouracil and mitomycin C on day one and 29 of radiation therapy\(^5\) (EL-1). Alternatively, oral capecitabine at a dose of 825 mg/m\(^2\) twice daily on each day of radiation can be used\(^6\) (EL-3)
3.1.2 Radiotherapy: 45 Gy administered as 1.80 Gy per fraction in 25 fractions to the pelvis and inguinal node area + 5.4-9.0 Gy boost to the tumor bed7

3.2 Localized disease (clinical stage Tany N2-3). Concurrent chemoradiotherapy8

3.2.1 Chemotherapy: 5-fluorouracil and mitomycin C on day one and 29 of radiation therapy (EL-2). Alternatively, oral capecitabine at a dose of 825 mg/m² twice daily on each day of radiation can be used6 (EL-3)

3.2.2 Radiotherapy: 45 Gy administered as 1.80 Gy per fraction in 25 fractions to the pelvis and inguinal node area + 5.4-9.0 Gy boost to the tumor bed and inguinal node area

3.3 Metastatic disease. Palliative chemotherapy with 5-fluorouracil and cisplatin9 (EL-2). Consider palliative radiation to local disease

3.4 Recurrent disease

3.4.1 Local recurrence or persistent disease post-chemoradiotherapy:

3.4.1.1 Persistent disease is defined as positive biopsy at 3 months from end of chemoradiotherapy

3.4.1.2 Recurrent disease should be biopsy proven

3.4.1.3 Anal recurrence. Consider abdominoperineal resection10 (EL-2)

3.4.1.4 Inguinal lymph nodes recurrence. Consider groin lymph node dissection (EL-3) or groin irradiation if not carried out earlier ± chemotherapy: 5-fluorouracil and mitomycin C11 (EL-3)

3.4.2 Distant recurrence: see section 3.3

3.5 Follow up.

3.5.1 Every 4 months in the first year and every 6 months thereafter for 5 years, then annually with digital rectal examination and inguinal palpation (EL-3)

3.5.2 CT scan of abdomen and pelvis annually for the first 3 years (EL-3)

References


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