

## Chapter 27

### CANCER OF UNKNOWN PRIMARY SITE

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#### INTRODUCTION

While primary tumor can be detected in approximately 98% of patients with metastatic cancer, primary site can not be found in the remaining 2%. This group of diseases is termed as cancer of unknown primary site (CUP). In postmortem examination of patients whose primary site can not be detected with clinical investigations, primary tumor can be detected in 75% of patients. The size is under 10 mm in most of the primary tumors detected [1, 2].

For making the diagnosis of CUP; following thorough history and physical examination, whole blood count, biochemical analyses, urinalysis, thoracoabdominal computerized tomography (CT), for women breast ultrasonographic examination and mammography and for men prostate-specific antigen (PSA) investigations can be carried out. In pathological examinations in addition to histological evaluation, immunohistochemical (IHC) staining is performed. If imaging techniques used remain inadequate, Positron Emission Tomography (PET) investigation can also be conducted [3].

New developments in imaging techniques and immunohistochemical methods made a novel classification of CUP's possible. Together with tissue-of-origin molecular profiling and next-generation sequencing (NGS) , which have been used commonly, individualized treatment approaches have started to become popular.

#### CLINICAL EVALUATION

##### Imaging

Unless there is counter indication, all CUP patients should undergo intravenous (IV) contrast thorax, abdominal and pelvic computerized tomography (CT) investigation. In the selection of other imaging techniques, clinical picture of the patients should be guiding [4]. In women whose isolated axillary lymphadenopathy (LAP) pathology results turn out to be adenocarcinoma and who do not have

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