# Summary

Carcinoma of the urinary bladder is second most common malignancy. It has a well defined etiology, natural history, treatment options and outcome.

E-cadherin-catenin complex is the prime mediator of intercellular adhesion in epithelial cells. Down regulation of E-cadherin-catenin complex was reported to be directly related to the invasiveness and prognosis of many human epithelial tumor types including bladder cancer.

This work aims at detection of the importance of E-cadherin-catenin complex in cases of bladder cancer as regards the invasiveness of the tumor.

This study was carried out on forty radical cystectomy specimens from 40 patients with muscle-invasive bladder cancer, during the period from April 2000 till December 2003, diagnosed at the pathology department, Tanta Cancer Institute. Rediagnosis of which was histopathologically confirmed. For each patient, the following clinical data were recorded:

1- Age.

2- Gender.

3- Clinical stage.

4- Presence or absence of distant metastasis.

5- Survival (living or dead).

All specimens were formalin-fixed and paraffin-embedded. From each paraffin block, one Hematoxylin and Eosin stained slide is prepared for conventional histopathological examination. The following parameter were recorded.

1- Histopathological type of bladder cancer.
2- Histopathological grade & degree of differentiation of each tumor.
3-Depth of muscle invasion by the tumor.
4- presence or absence of vascular invasion.
5- presence or absence of neural invasion.
6- Presence or absence of lymph node metastasis.
7- Safity margin invasion.
8- Presence of schistosomal infection (Bilharzialova) in tissue section.

In conclusion, we have found an association between loss of E-cadherin–catenin complex and invasiveness, pathological stage, distant metastasis, and poor survival of patients with bladder cancer.