Prostate cancer diagnosis, surgery and hormone treatment

I. Definition

Prostate cancer is a malignant disease of the prostate which is part of the male genital system. Amongst men, prostate cancer is one of the most frequently detected malignant diseases.
In Europe, there are 214 prostate cancer cases per 1000 males, making it more common now than both lung and colorectal tumours.
It is noticeable that evidence of prostate cancer is often found in patients who died as a result of other cancers.
The frequency of mutation increases exponentially with age.
Therefore, in developed countries, the health significance of prostate cancer increases with the average age of the population.
Currently, in developed countries, the rate of prostate cancer amongst male malignant diseases is 15%, while in developing countries it is only 4%.
Important findings have revealed that there are big differences in the prevalence of prostate cancer according to geographical regions.
Symptoms:
It causes extremely diverse signs and symptoms. Initially, it is mostly urinary problems that present themselves. They are very similar to the benign enlarged prostate's symptoms (frequent urination, urgent need to urinate or difficult urination). As the disease advances, signs normally associated with other kinds of tumours begin to appear.
Finally, urinating blood and/or urinary retention often occurs. The onset of metastasis makes the variety of symptoms even larger.

II. Diagnosis

The main tools of diagnosing prostate cancer are: the digital rectal examination (RDV), measuring the serum PSA level and the transrectal ultrasound (TRUS).
Diagnosis reveals from the surgical preparation or from the biopsy of the prostate tissue, that the presence of adenocarcinoma is evident.
The grade of a tumour is revealed during histopathological examination.
In most cases, in order to confirm the stage of the disease, either a CT scan, an MRI scan or isotopic analysis of bones are carried out.

III. Treatment

After confirming the stage of the tumour and the malignant grade, considering the patient's age, general health and any accompanying diseases, a decision is made as to whether surgical or conservative treatment should be used.
During surgical treatment, the entire prostate, the seminal vesicles and, in some cases, the pelvic lymph nodes are removed.
There are numerous types of conservative treatment, the most common of which is radiotherapy. Other common treatment involves blocking male hormone production with injections and tablets.