SUMMARY & CONCLUSION

The current study was conducted to evaluate the prevalence of prostate cancer in a localized community in Qualubia governorate, and to discover the value and statistical pattern of the diagnostic tools that used in its early detection.

A cross-sectional ,short-term prostate cancers screening study was applied on 1174 men aged 50 years and older, and all of them were evaluated by DRE and PSA.

Abnormalities in DRE, elevated PSA $\geq$ 4 ng/ml or both were considered positive results. There were 153 men considered positive, 63 men of them had PSA $\geq$ 4 ng/ml, 66 men of them had abnormal DRE and 24 men of them had both PSA elevation $\geq$ 4 ng/ml and abnormal DRE.

The TRUS and TRUS guided sextant biopsy were applied to the 153 men that showed positive screening test results

By TRUS examination there was no lesion in 84 men, 44 cases showed hypoechoic lesion, 18 cases showed isoechoic lesion, and 7 cases showed hyperechoic lesion.

There was positive biopsy results (prostate cancer) in 23 cases from 153 cases who underwent TRUS guided biopsy.

The detection rate was 1.7% when PSA cutoff 4 ng/ml is considered the only screening test and it was 1.1% when DRE is considered as a screening test alone, and by using both test the detection rate generally was 1.9%, so the use of both tests together is essential to avoid missing any cases.

The detection rate in the age group from 50 to less than 60 years was 0.8%, in the age group from 60 to less than 70 years it was 2.1% and from 70 years and more it was 6.6%.

The sensitivity of the screening tests in prostate cancer detection was 86.9% for PSA and 60.8% for DRE, and specificity was 48.5% for PSA and 41.5% for DRE, and the sensitivity of TRUS in detection of lesions suspecting malignancy was 62.5 % and specificity was 58.5%.

The pathological diagnosis of the 23 cases of prostate cancer was adenocarcinoma, with Gleason sum 5 in ten cases, Gleason sum 6 in seven cases, Gleason sum 7 in five cases, and Gleason sum 8 in one case.

Conclusion :

The use of DRE and PSA in prostate cancer screening is an effective methods in diagnosing prostate cancer especially the early forms

As the incidence of prostate cancer in Egypt is expected to be increased due to the more availability of the diagnostic modalities and the relative increase in the male life expectancy ,so it the time now to recommend for prostate cancer screening to discover the disease in earlier stage make it more amenable for effective treatment.