The 2005 International Society of Urological Pathology (ISUP) Consensus Conference on Gleason Grading of Prostatic Carcinoma

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Expert’s summary:
After the international WHO sponsored consensus meeting in Stockholm 2004, “International Consultation on Predictors of Patient Outcome in Prostate Cancer” [1,2], the International Society of Urological Pathology (ISUP) identified a need for an additional analysis of the Gleason system with a greater representation from the urological pathology community. More than 70 international leading pathologists in the field of Gleason grading participated in a consensus conference to achieve common guidelines for optimal grading of prostatic carcinoma in biopsies and prostatectomy specimens and how to classify newly described variants of adenocarcinoma of the prostate. Consensus was defined as when at least two thirds of the participants agreed and in most cases it was not a problem to easily achieve this goal. The panel discussed the previous recommendations [3,4] and what modifications were needed to be implemented: First they agreed upon always use low-magnification (4 or 10×) before eventually use 20× to verify the grade. A “2005 ISUP Modified Gleason System” was presented in which Patterns 1 to 5 were clearly described. Differences in the interpretation of biopsies and prostatectomy specimens were indicated. Overall, the recommendations follow a trend towards the use of higher grades than before and it is clearly defined how to classify rare forms of prostatic carcinoma. Small-cell carcinoma should not be graded according to the Gleason system.

Expert’s opinion:
Most urologists are well aware of the problem with a false low Gleason grade in prostatic biopsies compared with findings in radical prostatectomy specimens. Especially when patients are considered for a watchful waiting program, it is of utmost importance to obtain reliable grading of the present tumor. The present report contains valuable information not only to genitourinary pathologists, but also important messages for most urologists in their daily clinical practice. There is now a clear consensus how pathologists should grade biopsies to limit the obvious undergrading that many urologists are well aware of. Grading of biopsies is now based on even minimal findings of high-grade tumor cells and the use of a tertiary Gleason grade is restricted to prostatectomy specimens. The most interesting question is perhaps if the new recommendations will affect the use of Kattan nomograms and Partin tables to predict outcome of the disease [5]. The answer is that this does not seem to be a major problem. The algorithms and tables were not constructed with respect to the use of a tertiary Gleason grade and they also used the highest found Gleason grade. Furthermore, a change from Gleason pattern 3 + 4 to 4 + 3 or from Gleason score 6 to 7 will not have a major impact on the outcome in terms of predictive value. For this reason, there is no obvious need to reclasify old specimens in future studies, but the quality of data will always depend on the pathologist who performed the interpretation and what grading guidelines were employed.

References
[5] Partin AW, Kattan MW, Subong EN, et al. Combination of prostate specific antigen, clinical stage, and Gleason...
Erectile Dysfunction Following Radical Prostatectomy

Burnett AL

JAMA 2005;293:2648–53.

Expert’s summary:
This article was published in the “clinician’s corner” section of JAMA and described the case study of a 51 year old gentleman who underwent bilateral nerve sparing radical prostatectomy for prostate cancer. He was diagnosed a clinical stage T1c prostate cancer Gleason 6 and final pathology confirmed intracapsular disease with negative surgical margins, lymph nodes and seminal vesicles. The patient regained urinary continence in less than two months and underwent a trial of early postoperative prophylactic vasoactive intracorporeal injections which led him to regain the first natural erection sufficient for intercourse nine months following surgery. The discussion section of the article reports on the pathophysiology of postoperative erectile dysfunction and on the various therapeutic options available.

Expert’s opinion:
This article is interesting because it deals with a typical case study scenario which has to be addressed by many urologists every day. The mean age of patients at the time of prostate cancer diagnosis has been decreasing since the advent of PSA. When counselling a 50 year old man on the management for his prostate cancer one has to find the best balance between the greatest chance of long-term survival and the smallest risk of postoperative sequelae affecting the patient’s quality of life. When a long survival expectancy is foreseen surgery probably represent the first therapeutic option considered by the patients and surgeons. Both parties do have an important role with regards to determining postoperative erectile function. From the patient side, there is now enough evidence supporting the importance of the age at surgery, which is often related to the preoperative erectile function and possible vascular co-morbidities. Preoperative erectile function should be assessed by validated questionnaires. We recently showed that in a large cohort of consecutive candidates to a bilateral nerve sparing radical prostatectomy who claimed perfect potency during the initial patient-urologist interview, the self administration of the International Index of Erectile Function revealed that almost 40% of them did actually score for erectile dysfunction of various degrees [1]. Unfortunately this questionnaire puts scores in very similar ways both the absence of preoperative sexual function (which may well derive from anxiety and mood disorders due to the recent cancer diagnosis) with real erectile dysfunction. Ideally this questionnaire should be administered at the very initial office visit or at the time of prostatic biopsy. As an alternative, the questionnaire can be used while recalling the last 6 months, thus excluding the possible bad psychological influence of the procedure. Patients with diabetes, ischemic heart disease or a smoking habit do show a greater chance to develop postoperative erectile dysfunction and similar findings are seen in those using a PDE5-inhibitor already prior to surgery. It is mandatory for the urologist to investigate these preoperative aspects in detail during the initial interview with the patient. The surgeon still plays the most important role in the patient’s future. When operating on 10 consecutive potent patients in their early fifties, if one dose not have at least a 80% rate of recovery of spontaneous erections one year following the procedure, something is wrong with the surgical technique [2,3]. Time will tell if laparoscopy and robotic surgery will be able to further enhance this postoperative benchmark.

References


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