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## A descriptive analysis of Gleason grades of prostate carcinoma in a tertiary care centre in Sri Lanka

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**Introduction:** Prostate cancer (PC) is the 5th commonest malignancy in Sri Lankan men. Whilst limited studies exist on PC grades in Sri Lanka (SL), none have used the modified Gleason grading.

**Objectives:** 1. To describe the Gleason patterns (GP), scores (GS) and grade groups (GG), with a view to identifying the commonest by age group. 2. To compare with data in SL and foreign studies.

**Material and method:** Eighty-eight PCs reported between 2016-2020 (72-TRUS biopsies, 11-TURP and 5-radical prostatectomies) were retrieved. Data collected included type of sample, age, GP, GS, GG, and were analysed using SPSS 15.0.

**Results:** Ages ranged from 54-90 years (mean - 70.78), majority (n=67;76%) in the 61-80 age group. The commonest were GS-7 (n=34;38.6%), GP-4 (n=48;54.5%) and GG-IV (n=23;26.1%). GS-6 PCs=11.4%, ≥8=50. GS-7 was the commonest in ages ≤60 (n=7;63.6%), 61-70 (n=14;38.9%) and >80 (n=5;50%). GS-9 was the commonest in ages 71-80. GG-II and GG-IV were the commonest in ages ≤60 (n=4;36.4%) and >80 (n=3;30%). GG-III and GG-IV were the commonest in ages 61-70 (n= 9;25%), and GG-V in ages 71-80 (n=11;35.5%).

**Discussion:** The mean age was comparable to previous studies in SL and the United Kingdom (UK). Percentages of GS-6, 7 and ≥8 in this study were close to those of a Sri Lankan study, the widest difference being 4.2% more GS ≥8 PCs in our sample. We had fewer GS-6 PCs (11.4%) compared to studies from the UK (31.1%), Finland (>20%), the US (41%) and India (25% - old grading).

**Conclusion:** This study suggests that our population has a higher proportion of GS >6 PCs. Further studies are warranted for confirmation.

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