**Table 4: The exfoliation of urothilial cells and their patterns of arrangement in the urine sample smears of both dialyzing and control groups**

| No. of exfoliated urothilial cells | Group I (%) | Group II (%) | Group III (%) | Total (%) |
|---|---|---|---|---|
| Low (0-1 cells/HPF) | - | - | 20 (100) | 20 (21.7) |
| Moderate (2-6 cells/HPF) | 7 (21.2) | 5 (12.8) | - | 12 (13.0) |
| High (> 6 cells/HPF) | 26 (78.8) | 34 (87.2) | - | 60 (65.2) |
| Urothilial cells arrangement | | | | |
| Single | 6 (18.2) | 6 (15.4) | 20 (100) | 32 (34.8) |
| Cluster | 2 (6.1) | - | - | 2 (2.2) |
| Both | 25 (75.8) | 33 (84.6) | - | 58 (63.0) |
| Total | 33 (100) | 39 (100) | 20 (100) | 92 (100) |

**Table 5: The type (inflammatory or red cells) and the distribution of cells in both dialyzing and control groups**

| Red blood cells in urine samples | Group I (%) | Group II (%) | Group III (%) | Total (%) |
|---|---|---|---|---|
| Significant | 6 (18.2) | 8 (20.5) | - | 14 (15.2) |
| Non | 27 (81.8) | 31 (79.5) | 20 (100) | 78 (84.8) |
| Total | 33 (100) | 39 (100) | 20 (100) | 92 (100) |
| Inflammatory cells in the urine samples | | | | |
| Lymphocytic | 3 (9.1) | 1 (26) | - | 4 (4.3) |
| Lymphocytic and neutrophilic | 1 (3.0) | 1 (26) | - | 2 (2.2) |
| Non | 29 (87,9) | 37 (94.9) | 20 (100) | 86 (93.5) |
| Total | 33 (!00) | 39 (100) | 20 (100) | 92 (100) |

## Discussion

For the most practicing nephrologists and pathologists, the term urinary tract cytology brings to mind almost immediately the diagnosis of urinary tract neoplasm. Obviously many non neoplastic disorders may also be reflected in the urine cytology specimens [17]. Thus the technique of the cytological diagnosis of urinary tract malignancy has been around for well over 150 years and widely published for at least 65 years [18].

Under normal circumstances mid stream freshly voided urine contains relatively scattered urothilial cells and few cells of other types, including polymorph nuclear leukocytes, red cells and macrophages [19], however, urinary cytology preparations are usually not ordered by the clinicians unless having a clinical suggestion of urinary tract disease, an abnormal urine analysis, or both [20]. Thus the sparsely cellular "normal urinary cytology preparation is unusual in