all normally descended TDS testes as compared to all testes with a history of cryptorchidism (p=0.010) and to control testes (p=0.016), respectively. Furthermore, normally descended TDS testes without a cryptorchid counterpart were found to have significantly fewer RCs than unilateral cryptorchid testes (p=0.020) and control testes (p=0.030), respectively. Descended TDS testes with cryptorchid counterparts contained significantly fewer RCs than unilateral cryptorchid testes (p=0.021) and control testes (p=0.045), respectively.

As shown in Table 3, three patients had testes located intra-abdominally at the time of the biopsy and these specimens contained a significantly higher number of RC-containing LCs compared to patient testes with a high (p=0.003) or a low (p=0.018) scrotal position, respectively. Inguinally located testes had a significantly higher number of LCs with RCs than the TDS patient testes positioned high (p=0.026) or low in the scrotum (p=0.028).

**DISCUSSION**

In this study, we expanded the existing knowledge on LCs clustering into micronodules, the distribution of RCs in these cells and an association with hormonal function in adult patients with signs of testicular dysgenesis. The main finding of this study is the relative paucity of RCs in LC clusters, but with a paradoxical increase in the RC numbers in cryptorchid testes. Surprisingly, the distribution of RCs did not correlate with the severity of androgenic dysfunction in TDS patients with LC micronodules, which was reflected in this study by lower serum testosterone/LH-ratios, decreased serum inhibin B and by reduced testis size, in line with our previous study. In another study, we have demonstrated that LC micronodules in patients with TDS and Klinefelter syndrome, a condition known for very large clusters of LCs, contain proportionally higher numbers of immature LCs due to an increased renewal of the LCs stimulated by LH. The data in the present study provides evidence that the scarcity of RCs may be a characteristic feature of immature adult LCs, this hypothesis being in concert with previous studies of hyperplastic LCs in infertile patients and men with Klinefelter syndrome. 28-31

In this study we re-investigated a previously reported finding that the number of RCs in undescended testes may be significantly greater than in normally descended testes.15 We have confirmed a high number of RC-containing LCs in patients with a history of undescended testes, and revealed an interesting pattern of an increasing proportion of the RC-containing cells with the more cranial testis position and with significantly greater abundance of RCs in intra-abdominal testes. This is in line with influence of temperature, suggested by Kozina’s study. Surprisingly, in our study testes that were cryptorchid at birth, and especially unilaterally undescended testes, seemed to contain higher numbers of RCs as compared to normally descended testes in TDS patients. It was unexpected because the specimens from men with a history of cryptorchidism often contain LC micronodules. But when assessing specimens of all men who reported ever being cryptorchid, those with micronodules had