Histopathological patterns of testicular biopsy in male infertility: A retrospective study from a tertiary care center in the western part of Saudi Arabia

Sir,

I have read with interest the article by Abdullah *et al.* published in your journal.[1] The authors have presented the histopathological pattern observed on testicular biopsies from infertile men in western Saudi Arabia. It is an important contribution to the existing literature on this subject, especially from developing countries. The causes of infertility differ in different areas of the world, and these are partly responsible for the variability of pathological lesions in different studies. Moreover, the lesions also differ depending on the nature of infertility, semen sperm count, duration of infertility and many other factors.[2] However, more important of all, is the use of divergent reporting systems and the imprecise terminology for the interpretation of testicular biopsies in different centers.[3-5] The authors have rightly pointed out that, currently, there is no universally acceptable system of testicular biopsy reporting and that the use of imprecise terminology hampers direct comparison among the studies. We also receive a fair number of testicular biopsies for the investigation of male infertility, and our findings are, more or less, similar to the subject study. However, I want to draw the attention of the authors to a few inconsistencies in their study:

In the mixed pattern, the authors give a mixture of Sertoli cell-only syndrome (SCOS) and hypospermatogenesis. This is in contradiction to the definition of SCOS provided in the methods and discussion, as "the term should only be applied to a universal pattern wherein no germ cells are seen in any profile."[4]

It is important to subclassify SCOS further, as it is of etiopathogenetic and prognostic importance.[4] I wonder if the authors undertook this exercise in their study.

Hypospermatogenesis is the most common pathological lesion in the study. It is also one of the lesions with greatest interobserver variability in reporting, and a semiquantitative scoring system is helpful in its assessment. Johnson's score is most commonly used and should have been utilized to give a better assessment.[5]

There are some discrepancies in the use of numbers. In the abstract, it is stated that normal spermatogenesis was found in 14 cases, while in Table 1, it is given as 13. In the results, it is stated that 33 patients underwent bilateral testicular biopsies, while in the discussion it is 27.

Infertility is one of the known risk factors for intratubular germ cell neoplasia (IGCN), but, surprisingly, not a single case of IGCN was observed in the study. I suppose, younger mean age may be one factor. Although standard deviation is not given, it appears that age distribution is not normal, and majority of the patients are young.

The authors propose that one of the factors causing discrepant results in histopathology is the different biopsy policies among the urologists. This is important and ignored altogether often. For example, the subject study has also not specified the key indications of the testicular biopsies. No correlation has been sought between sperm count and testicular biopsy findings. The authors conclude that the study has shed some light on the etiological factors underlying these pathological patterns, which is not true. Reference 4 is written incorrectly.

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REFERENCES

1. Abdullah L, Bondagji N. Histopathological patterns of testicular biopsy in male infertility: A retrospective study from a tertiary care center in the western part of Saudi Arabia. Urol Ann 2011;3:19-23.
2. Dohle GR, Colpi GM, Hargreave TB, Papp GK, Jungwirth A, Weidner W. EAU guidelines on male infertility. Eur Urol 2005;48:703-11.
3. Ozgur GK, Sivrikaya A. Clinical, endocrinological, and histopathological evaluation of male infertility. Int Urol Nephrol 1990;22:585-8.
4. McLachlan RI, Rajpert-De Meyts E, Hoe-Hansen CE, Kretser DM, Skakkebaek NE. Histological evaluation of the human testis-approaches to optimizing the clinical value of the assessment: mini review. Hum Reprod 2007;22:2-16.
5. Johnsen SG. Testicular biopsy score count-a method for registration of spermatogenesis in human testes: Normal values and results in 335 hypogonadal males. Hormones 1970;1:2-25.

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