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## INVITED EDITORIAL

Male Fertility

# Basic concepts and recent advancements in the study of male fertility

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**Many controversial topics regarding Andrology in general, and male infertility more specifically have been discussed and debated for decades. Numerous manuscripts and entire journals have been dedicated to the dissemination of standardized information with multiple reviews covering similar topics. This massive amount of data leads to difficulty identifying pertinent clinical practice guidelines. Furthermore, detailed instructions on how to manage common clinical conditions tend to be diluted by copious amounts of text and superfluous information.**

This special edition of the *Asian Journal of Andrology* (AJA) has been organized with the simple goal of creating an all-encompassing primer for clinicians in general and Andrologists in particular. We hoped to assist in developing practice patterns for physicians by including chapters containing basic clinical algorithms, management strategies and relevant topics.

We sought to start this issue with a topic that all Andrologists become very familiar

with when they begin clinical practice, testicular pain. Dr. Levine's manuscript gives an excellent synopsis of the subject and highlights the clinical modalities used to address this challenging clinical problem. The management of varicocele in the *in vitro* fertilization era is also discussed along with a section on vasectomy reversals that include a focus on techniques, outcomes and intra-operative decision-making.

Another difficult clinical situation that many Andrologists face is the management of infertility in men with spinal cord injuries. Drs. Brackett and Lynne present a manuscript that provides an excellent synopsis of how to obtain sperm as well as the success rates using various modalities in this unique patient population. Basic concepts in the medical management of male fertility are highlighted including traditional, well-described medications such as Clomid as well as the recent research behind nutraceuticals.

A topic that has been gaining attention in recent years is testosterone supplementation, and Dr. Coward presents an in-depth exploration of testosterone therapy's impact on spermatogenesis. Similarly, another chapter focuses on the importance of complementary and alternative medicines for idiopathic infertility. With many couples visiting fertility specialists and seeking

alternatives to surgery, partly due to cost, this section provides a good resource for nontraditional treatment alternatives. In addition, the thought-provoking topics of advanced paternal age and the role of estradiol in men are also discussed. Dr. Wassersug and colleagues then provide an enlightened view on the psychological contexts of reproduction in several unique populations including men in same-sex relationships, castrated men and the trans-sexual population.

Basic research plays a pivotal role in Andrology. We have sought the opinions of several experts in the field to address challenging topics. Drs. Sikka and Hellstrom provide a unique update on laboratory techniques and special tests in diagnosing male reproductive failure while Dr. Lamb provides an excellent review on advances in the genetics of testicular dysfunction. Finally, we have included excellent manuscripts reviewing scientific concepts of seminal biomarkers.

As editors, we chose to focus on the basics of male fertility and management while expanding the reader's focus to include recent clinical advances and basic sciences. The goal of this issue of the AJA was to become a resource that all Andrologists would keep on their shelves and frequently consult.

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