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EDITORIAL

CONTEMPORARY ISSUES IN MANAGEMENT OF IMPOTENCE

"Man survives earthquakes, experiences the horrors of illness, and the tortures of the soul. But the most tormenting tragedy of all time is, and will be, the tragedy of the bedroom".

-Leo Tolstoy

Sex is a man's second strongest instinct, after that of survival. This means that if a man's life is not immediately imperiled, the next thing he will automatically think of is sex. This is a fundamental reality of life and explains why sexual impotence or erectile dysfunction is associated with so much of distress, guilt, shame and embarrassment.

The past decade has witnessed scientific breakthrough that have changed the concept and clinical management of erectile disorders. The term impotence has been replaced by the 'erectile dysfunction' proposed by Consenses Development Conference (1992) at the National Institute of Health (NIH), and defined as the "Inability of the male to achieve an erect penis as part of the overall multifaceted process of male sexual function".

Impotence is a fairly common condition and recent study have estimated that at least 10-20 million people in America suffer from impotence (Feldman et al.,1994). One can only imagine the prevalence in Indian population, but if flourishing aphrodisiac industry is any indication, it seems to be fairly common.

Advances in anatomy, physiology and neurovascular factors responsible for erection have advanced our knowledge of how exactly an erection occurs. With the advancement in these fields, various medical risk factors for impotence have also been delineated and now it is very well recognized that large majority of patients have impotence secondary to some organic cause. The leading causes include diabetes, heart disease, hypertension and certain drugs which include hypoglycemic agents, antihypertensive, vasodilators and cardiac drugs. Obesity, heavy alcohol intake and smoking are additional risk factors.

It is well known now that erection is essentially a neurovascular phenomena. Blood vessel and smooth muscle contraction depends on adrenergic mechanisms while cholinergic impulses cause blood vessel and corporeal smooth muscle relaxation. It has been recently demonstrated that penile nerves as well as penile blood vessels and corporeal smooth muscle endothelium releases nitric oxide, which mediates vasodilatation of the penile vascular resistance bed. Nitric oxide stimulates formation of cyclic guanosine monophosphate (cGMP) which promotes smooth muscle relaxation (Burnett et al.,1992). Vasodilatation then results in tumescence. It is also known that phosphodiesterase is responsible for breakdown of cGMP and may play an important role in detumescence, and hence inhibition may result in improved erection. The wonder pill "*Viagra*" which contains *Sildenafil* is infact inhibitor of this particular enzyme system.

As the research has advanced into the understanding of various factors responsible for erection and erectile dysfunction. It has resulted in a subtle "turf wars" to determine whether psychiatry, urology, endocrinology, medicine or surgery should dominate the field. Masters and Johnson's (1970) had declared that 90% of sexual impotence is psychogenic, whereas urologists have more recently declared that 90% of impotence is organic. Both sides are over emphasising the importance of their respective speciality, not just for their disrespectful attitude towards one another but for having

failed to develop more sophisticated notions of etiology.

Recently, an interactive model has been proposed in which psychological and medical factors are conceptualized as interactively additive (Levine, 1992). This model emphasizes the ever-changing influences of biology and psychological events and proposes that regardless of precipitating cause/causes, changes in both domains occur. This model recommends step wise treatment in the psychological and biological domains.

Before seventies, sexual problems were unquestioned clinical responsibility of psychiatrists, although the tools for these problems were somewhat limited. It is sad that mental health professionals ignored the subject in training and research even though more expertise and knowledge have been accumulated. The domain of impotence is gradually shifting to other professionals especially urologists.

As more and more new techniques are being developed for the management, the mental health professionals are finding them selves sidelined. However the importance of psychological management can not be underestimated as patient's who opt for oral medication, self injection therapy or go for penile prosthesis or even surgery require psychological interventions. It is therefore, the responsibility of psychiatrists to update themselves in the ever changing field of clinical sexuality.

Over the past few years, there has been a fundamental change in understanding the etiological basis of not only sexual dysfunction but in all major psychiatric disorders. Today, even functional psychosis and neurotic disorders are conceptualized as having 'subtle' abnormalities of structure and function of brain. This new understanding coupled with progress in psychopharmacology has brought about a tremendous change in their treatment outcome.

The progress in the field of impotence simply reflects the need of human species for satisfaction and perfection therefore one need to pay more emphasis on physical causes of impotence. Although the time tested value of history taking can not be undermined, it is imperatively in the changing scenario that appropriate physical examination and laboratory testing is carried out. A change of attitude is, all that is, required for most mental health professionals or else they will soon be deprived from this all important field of andrology.

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