Impairment of Couple Relationship in Male Patients with Sexual Dysfunction is Associated with Overt Hypogonadism

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ABSTRACT

Introduction. Couple sexual dysfunction is a common, but not often studied, problem.

Aim. We have previously reported that disturbance in the relational domain, as measured by SIEDY Scale 2 (exploring, as reported by the patient, menopausal symptoms, partner's medical illness interfering with sexual activity, and reduced partner desire and climax), is associated with different sexual dysfunctions, such as hypoactive sexual desire, erectile dysfunction (ED), delayed ejaculation, and psychological disturbances. As all of these symptoms could be associated with hypogonadism, we have investigated the possible relationship between androgen levels and an unhappy couple relationship.

Methods. A consecutive series of 2,302 (mean age 53.2 ± 12.5 years) male patients with ED was studied.

Main Outcome Measures. Several hormonal parameters were investigated, along with penile Doppler ultrasound (PDU) and the Structured Interview on Erectile Dysfunction (SIEDY) and ANDROTEST. Higher ANDROTEST score identifies a higher prevalence of hypogonadism-related symptoms and signs.

Results. SIEDY Scale 2 score was associated with decreased intercourse frequency, severe ED, lower dynamic peak systolic velocity at PDU, and clinical (ANDROTEST score) and biochemical (low total and free testosterone) hypogonadism, even after adjusting for cofounders, such as patient's and partner's age, waist circumference, and smoking habit. Alternative models were explored using these different factors as dependent variables in order to evaluate the specific relationship among the parameters studied. Multiple logistic regression analysis indicated that low penile blood flow and decreased intercourse frequency are bi-directionally coupled to poor relational domain, while the association with hypogonadism was mediated through sexual hypoactivity or inertia.

Conclusions. Our data suggest that, in subjects consulting for sexual dysfunction, a deterioration of the couple's relationship is associated with impairment in sexual activities, which, in turn, can lead to a mild hypogonadism. Any speculation on pathogenetic relationships should be confirmed through prospective studies or intervention trials.

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Key Words. Couple; Erectile Dysfunction; Hypogondism

Introduction

The etiology of erectile dysfunction (ED) is traditionally thought of as either organic or psychogenic, in a dichotomized view, which is, indeed, far from reality [1,2]. Every patient, whose impotence is because of an organic disorder, especially if it is long standing (as, unfortunately, is often the case), builds his own world of fear, anxiety, worry, depression, and distress around his

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disorder. Furthermore, anyone who has treated a patient with ED of any origin will know that even the most organic impotence—such as that caused by diabetes—is *also* psychogenic. In fact, when a sexual encounter results in frustration and stress rather than gratification, it is all but impossible not to construct a psycho-neuroendocrine vicious cycle of distress and depression, spectator syndrome, and performance anxiety [1,2]. All impotence of organic origin therefore also has a psychogenic aspect. Accordingly, quality of life in people with ED is known to be on average 10% lower than in the general population [3]. In addition, Tomlinson and Wright [4] reported that ED caused serious distress with marked effect on self-esteem and relationships.

Relational factors, such as long, hostile and more than likely dissatisfying couple bonding, represent another independent factor underlying ED [2,5]. For couples, sex is perhaps one of the most important parts of the relationship; an experience that brings them closer together, strengthens their bond, and helps keep the spark alive. Unfortunately, over time, everyday stressors like work, children and money, or physical issues can leave couples worn out and uninterested. If left unaddressed, a lack of intimacy can drive a wedge between partners, causing them to drift apart. Furthermore, available data clearly show that sexual dysfunction in one member of the couple induces marked distress in the partner, which in turn can generate sexual dysfunction. In line with this hypothesis, Öberg et al. [6] previously reported that partner-manifested ED often leads to or may be caused by a woman's difficulty in reaching orgasm. The same study also demonstrated an association between male partner-delayed ejaculation and lubricative insufficiency in the female partner, as well as a reasonable correlation between premature ejaculation and female distress as a result of orgasm dysfunction [6]. In addition, the Female Experience of Men's Attitudes to Life Events and Sexuality study showed that women engaged less frequently in sexual activity after their partner developed ED, and that their sex life was less satisfactory when the ED of their partner was severe [7]. Similar results have been reported by other authors [4,7–20]. These findings are not surprising. In fact, when the male develops ED, his partner may question her own attractiveness, sexual skill, and ability to keep her man focused. When the male feels unlovable, his partner may feel unloved, interpreting his inability to perform as proof-positive of her inability to pique his interest. At that point, it is not just their sex life that starts to fail. In light of these findings, recommendations have been made that research should focus on the impact of ED on the couple, rather than simply the man, and that clinicians should involve women in assessment and treatment decisions when ED is a problem [2,4,8,19–22].

The concept of couple sexual dysfunction was previously addressed by our group [5] by using the Structured Interview on Erectile Dysfunction (SIEDY), which allows the identification and quantification of the different factors (organic, relational, and intrapsychic) underlying ED, through different scales [23]. SIEDY is simply a first screening of ED patients, providing scores for the relational component (Scale 2), as well as those that quantify the organic (Scale 1) and intrapsychic (Scale 3) components. In particular, we previously demonstrated that different degrees of disturbance in the relational domain were associated with hypoactive sexual desire, ED, delayed ejaculation, and psychological disturbances [5,24–26].

Aim

As different sexual symptoms associated with the impairment of the relational domain could be considered a feature of hypogonadism, the aim of the present study was to evaluate in a retrospective cross-sectional design whether an overt condition of hypogonadism is related to an unhappy or even hostile couple relationship, as detected by SIEDY Scale 2.

Methods

A consecutive series of 2,302 patients attending our Unit for ED for the first time and reporting a stable (more than 3 months) couple relationship was retrospectively studied. The characteristics of the sample are summarized in Table 1.

The patients enrolled underwent the usual diagnostic protocol applied to newly referred subjects at the Andrology Outpatient clinic. All the data provided were collected as part of the routine clinical procedure. Patients were interviewed prior to the beginning of any treatment, and before any specific diagnostic procedures, using the SIEDY [23] and ANDROTEST [27] structured interviews. SIEDY is a 13-item interview, previously validated, made up of three scales, which identify and quantify components concurring with ED. Scale 1 deals with organic disorders, Scale 2 with disturbances in partner relationship, and Scale 3