EDITORIAL

This article is pretty interesting, but I would like to point out some matters, since I have been interested in this subject for many years. Of 1500 patients in the study 94.6% had had successful intercourse using vacuum constriction device (VCD). This rate of positive response to VCD is amazing. The initial overall response rate is approximately 80% to 90%. However, satisfaction with VCD treatment typically fades with time, as patients report dissatisfaction with how awkward or unnatural the devices are to use, hinging or buckling of the erection with thrusting, and dissatisfaction with the fact that the erection is false one (and therefore cold) which can be off-putting to the partner.

Patients who have diminished sensation in their penis, especially men with spinal cord injury, are at higher risk for trauma with repeated use of the constriction ring. It should be used with extreme caution in this group of patients and the band should be applied for only short periods of time. Unlike the manufacturer (HAMRAH Co.) which advertise the use of VCD for correction of penile curvature too, men with Peyronie's disease (PD) (acquired penile curvature) or congenital penile curvature, with significant degrees of curvature should be discouraged from using a VCD, as the even curved cylinder may exert significant stress on the bent penis resulting in trauma to the already curved shaft of the penis. I have visited many men with congenital penile curvature who developed sever and progressive PD, after using VCD with curved cylinder for treatment of ED. Other authors also reported development of PD with long term VCD use.[1]

I strongly disagree with recommendation of VCD in patients with ED and curvature correction. Also patients with hematologic types of veno-occlusive priapism (sickle cell disease, thalassemia, or leukemia) should not use a VCD at all. Moreover, for considerable number of patients the VCD is unacceptable. They believe this way due to two important factors, namely cosmetics and difficulty integrating intercourse with VCD into love-making. In the white men the entry of blood alongside with the application of a constriction ring renders the penis cool and results in a large amount of superficial vein swelling. These factors make the VCD induced erection a non-cosmetic one and the younger men and the impotent patient who is currently not in a stable long-term relationship often find this undesirable and unacceptable. In an average man using VCD will typically take 10-20 minutes to result in a significant penile rigidity sufficient for penetration. This time frame plus the unnatural erection, makes this treatment option cumbersome for most men and they may have great difficulty integrating it into sexual life. In additions, the VCD has own complications. Bruising, skin breakdown, and penile pain associated with the application of the constructive ring have already been known. The tightness of the band, most of the time result in failure to achieve an antegrade ejaculation and sexual satisfaction. One of the important drawback with the erection obtained with the VCD is that it may cause penile hinge at the point of ring application. As a result, the penis behind the constrictive band is soft and only that portion of the penile shaft that is past the ring has any degree of unnatural rigidity. Hence, the constrictive ring must be applied as far towards the base of the penis as possible.

Drop-out rates of up to 65% have been reported[2] and the most common reasons for drop-out include, penile pain, poor rigidity, failure to ejaculate, dissatisfaction with penile appearance

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and temperature, bothersome, and embarrassment. Embarrassment is an important factor and affected mostly with cultural issue. As a result the rate of embarrassment varies in different community. In my opinion, the most important factor in our community for the reluctance to use the VCD is embarrassment. On the contrary with the results of present study, of patients who address themselves to me for treatment of impotence and are good candidate for using the VCD, less that 10% accept even to try the VCD.
The severity of erectile dysfunction (ED) is a significant factor in drop-out rates. Unfortunately, despite a large study sample size (n=1500), study subjects have not been categorized by severity of ED. The participants can be categorized into three subgroup according to IIEF erectile function domain score, namely patients with mild, moderate, and sever ED. In a study by Dutta and Francois's 129 patients with organic ED who were interested in the VCD received the device after thorough training.[2] Their attrition rate was 65% overall and was lowest among patients with moderate ED (55%). All patients with mild ED discontinued use, and 70% of patients with complete ED also discontinued use. Of the patients who discontinued, most stopped VCD use early (median 1 month, mean 4 months). The overall failure rate was 65%.
The authors of present study claim that success rates are highly influenced by the degree of training. In Dutta and colleagues' study the participants were highly motivated and best trained cohort of patients clinically possible. Before drawing final conclusion we should wait for further studies from the same region.

REFERENCES

1. Kim JH, Carson CC 3rd. Development of Peyronie's disease with the use of a vacuum constriction device. J Urol. 1993;149:1314-5.
2. Dutta TC, Eid JF. Vacuum constriction devices for erectile dysfunction: a long-term, prospective study of patients with mild, moderate, and severe dysfunction. Urology. 1999;54:891-3.

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REPLY BY AUTHORS

With respect, I would like to inform you that all patients participated in this study were either refused or had failure to respond to intracavernosal injection of vasodilator drugs. Meanwhile the patients and their spouses where explained about advantages and disadvantage of vacuum constrictive device (VCD) and penile prosthesis (e.g. cost, probability of infection and malfunction, smaller penis and invasiveness). The success rate of 94.4% is regarding ability to perform vaginal penetration and issues regarding success rate have been discussed in detail at the discussion of the article. Patient and their spouses where free to choose any treatment modality. Despite the disadvantages' of VCD most of them were happy using VCD for treatment of erectile dysfunction (ED) than going for prosthesis surgery or doing nothing.
We did not ordinarily include patients with Peyronie's disease (PD), congenital penile curvature, and hematologic types of veno-occlusive priapism in the study. Kim's finding on development of PD with long term use of VCD is just a case report and no other such report or study exists in the literature. Also we have a group of patients with spinal cord injury and ED under observation and the paper of the study will be released in near future.
I admire editor's opinion regarding reluctantly of using VCD in our community and his points of views but we know that personal points of view have its own level of value.
Amongst our patients only less than 2% discontinued and excluded from the study.
This is very different from the Duttas's study, which possibly may be due to easily available other effective modalities (penile prosthesis) in those countries.
The aim of our study was to evaluate the effect of VCD on erection and the cause of losing it during intercourse, and we have evaluated the issue in detail for the first time and no other study have mentioned importance of patients' spouses in men using VCD for treatment of their ED.
With respect to the editorial comments, that repeatedly has emphasized over the disadvantages of VCD, I would like to mention a point that considering all side effect and disadvantages, VCD is considered as the first line of therapy after phosphodiesterase type 5 inhibitors in guidelines published by EAU 2013.
At the end I believe it is better to be fair regarding various treatment modalities rather than writing only and only about VCD drawbacks.

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