

### Synopsis

This paper describes the role of hypnosis in the differentiation between the organic and psychogenic cases of erectile dysfunction.

This differentiation is of great importance in terms of therapy.

The main tests used currently to establish the diagnoses are either invasive such as Intracavernosal Injection of Papaverine (ICIP), or costly and disturbing to the

person as in Nocturnal Penile Tumescence (NPT).

Erection facilitated through hypnosis can be taken as indication of the psychogenic origin of the problem.

Pertinent neurobiological processes are discussed. The procedure and other practical considerations are detailed. A case is illustrated.

# Erectile dysfunction: Hypnosis' role in the diagnostic differentiation between psychogenic and organic causes



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By  
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**C**oncern over male sexual performance and especially over penile erection has been part of every culture in every age. Obviously this concern is not new.

However, additional factors now fuel public interest in the evaluation and treatment of erectile dysfunction.

This includes the growing expectation that sexual function is a lifelong capacity, not usually curtailed by middle or even old age.

It is also influenced by the growing importance of sexual function in personal life; women's rising expectations of sexual activity and satisfaction; decreased media censorship of sexual materials and increased media exposure of medical information.

In addition there is now a growth of professional literature on erectile dysfunction in (contrast to other sexual problems) and, in the United Kingdom, recent changes in professional codes of ethics to permit therapists' advertisements.

## Causes of erectile dysfunction

The causes of erectile dysfunction can be divided into organic and psychogenic (for more details, see Bancroft<sup>1</sup>):

	Organic:	Psychogenic:
1-Metabolic:	<i>diabetes</i>	1 – Performance anxiety.
2-Neurological:	<i>multiple sclerosis; tumour or injury of spinal cord; autonomic neuropathy; motor neuron disease.</i>	2 – Relationship problems.
3-Vascular:	<i>atherosclerosis; venous leak.</i>	3 – Psychiatric disorders; e.g. depression.
4-Corporal fibrosis:	<i>Peyronie's disease; postpriapism.</i>	4 – Deep seated conflicts and gender orientation confusion
5-Alcohol.		
6-Drugs:	<i>e.g., antihypertensives and neuroleptics.</i>	
7-Hormonal:	<i>Hyperprolactinaemia</i>	

However the causes can be multifactorial and one can think of erectile dysfunction under five-categories. (Tiefer & Melman<sup>2</sup>); (1) purely organic, (2) primarily organic, (3) primarily psychogenic, (4) purely psychogenic, (5) unknown.

It used to be believed that 90 per cent of cases of erectile dysfunction were due to psychological factors. Now it is thought that at least 30 per cent of cases have an organic basis (Segraves et al.<sup>3</sup>).

## Main test currently used: ICIP and NPT

**To exclude organic causes of erectile dysfunction, invasive (ICIP) and non-invasive methods (NPT) have been used. However, both these methods have side effects and drawbacks.**

**In ICIP erection can be induced by the injection of papaverine (smooth muscle relaxant) into the corpus cavernosum of the penis.**

This method can be used to discriminate between neurogenic and psychogenic erectile dysfunction on the one hand and vascular dysfunction on the other hand; there is a good response (erection) in neurogenic cases; response in psychogenic cases is variable, while men with severe arterial occlusion are unlikely to respond well to papaverine.

A good response to the drug excludes severe arterial insufficiency or venous leakage as a main cause of the dysfunction.

The main problem with this procedure is the occurrence of priapism (prolonged and painful erection) in five to 10 percent of users (Masters et al.<sup>4</sup>). Although this figure includes priapism due to the use of the drug for therapeutic as well as diagnostic reasons, the number of cases caused by the diagnostic use of papaverine cannot be underestimated.

If such erection is allowed to go on too long, permanent damage to the erectile structures can take place. To prevent this from happening, intrapenile injection of an antidote (e.g. metamizolol) can be used to reverse erection after 6-12 hours. However these antidotes have potential hypertensive effects and have to be used with extreme caution (Bancroft,<sup>1</sup>).

**NPT is a non-invasive diagnostic test, based on the fact that men have penile erection during REM (rapid eye movement) sleep.**

Hobson<sup>5</sup> notes that in REM sleep the penis of the male and the clitoris of the female are both periodically engorged through the night in concert with changes in the brain, and hypothesises that dream sleep provides maintenance and development of the brain circuitry involved in sexual activity and also perhaps "genetically determined behaviour rehearsal."

<sup>1</sup> Bancroft, J. (1989). "Human Sexuality and its Problems". Edinburgh: Churchill Livingstone.

<sup>2</sup> Tiefer, L., & Melman, A. (1989). *Comprehensive Evaluation of Erectile Dysfunction and Medical Treatments*. In: S. R. Leiblum & R. C. Rosen (Eds.), "Principles and Practice of Sex Therapy." New York: The Guildford Press.

<sup>3</sup> Segraves, K. A., Segraves, R. T., & Schoenberg, H. W. (1987) *Use of sexual history to differentiate organic from psychogenic impotence*. "Archives of Sexual Behaviour", 16, 125-37.

<sup>4</sup> Masters, W. H., Johnson, V. E., & Kolodny, R. C. (1992). "Human Sexuality". Harper Collins.

<sup>5</sup> Hobson, J. A. (1990). "The Dreaming Brain". London: Penguin.

<sup>6</sup> Schiavi, R.C., & Fisher, C. (1982). Assessment of diabetic impotence: measurement of nocturnal erections. "Clinics in Endocrinology and Metabolism" 11 (3), 769-784.

<sup>7</sup> Spence, S. H. (1991). "Psychosexual Therapy: A Cognitive-Behavioural Approach". Chapman & Hall.

<sup>8</sup> Kleitman, N. (1992). *The basic rest-activity cycle 32 years later: An interview with Nathaniel Kleitman at 96*. Interviewed by E. Rossi. In: D. Lloyd & E.L. Rossi (Eds.). *Ultradian Rhythms in Life Processes* (pp. 303-306). New York: Springer.

<sup>9</sup> Singer, J. L., & Pope, K. S. (1981). Daydreaming and imagery skills as predisposing capacities for self-hypnosis. "International Journal of Clinical and Experimental Hypnosis", 29, 271-281.

<sup>10</sup> Morrison, A. R. (1990). *A Window on the Sleeping Brain*. In: R. R. Llinas (Ed.), "The Workings of the Brain: Development, Memory and Perception". New York: W. H. Freeman and Co.

<sup>11</sup> Levy, A., & Lightman, S. L. (1994). Diagnosis and management of pituitary tumours. "British Medical Journal", 308: 1087-91.

<sup>12</sup> Veldhuis, J., & Johnson, M. (1988). Operating characteristics of the hypothalamo-pituitary-gonadal axis in men: Circadian, ultradian and pulsatile release of prolactin and its temporal coupling with luteinizing hormone. "Journal of Clinical Endocrinology & Metabolism", 67 (1), 116-123.

Most experts believe that for NPT, a two or three night stay in hospital is usually required with measurements of other sleep parameters (electroencephalogram, electro-oculogram and electromyogram) in order to avoid misleading conclusions due to the possibility of missing abnormal sleep patterns (Schiavi & Fisher<sup>6</sup>).

The presence of normal NPT is suggestive of a psychogenic origin.

This procedure has three main shortcomings. It needs people adequately trained in polysomnography.

This makes it more expensive and restricts its use to major centres.

Staying in hospital, even for two or three nights, is also expensive and can interrupt the life and work of the person.

Furthermore, people do not always respond as they normally would, in unfamiliar sleep conditions hence a significant proportion of men whose erectile problems are primarily psychogenic in origin fail to show positive NPT responses and can be mistakenly classified as organic (Spence<sup>7</sup>).

## Neurobiological Mechanisms

Hypnosis can replace the invasive or non-invasive techniques in deciding whether erectile dysfunction has an organic or psychogenic basis.

Erection occurring during hypnosis is an indication of the psychogenic nature of the dysfunction. Erection can be induced during hypnosis through neurobiological mechanisms: normalisation of the ultradian rhythm and activation of the right hemisphere, with associated increase in primary-process thinking.

These two mechanisms are discussed below.

### 1) Normalisation of the ultradian rhythm

People normally, when awake, pass through ultradian cycles which occur at 90-minute intervals, plus or minus about 30 minutes (Kleitman<sup>8</sup>). Each cycle is a period of activity followed by rest, characterised by REM sleep (dreaming), pupil dilation, penile and clitoral engorgement and a change in nasal breathing from one side to another which is related to cerebral hemispheric dominance. The rest phase of each cycle lasts about 15-30 minutes.

**Daydreaming is necessary for optimum intellectual function, self-control and a peaceful inner life; it can help us to cope with boredom and help us relax when engaged in some demanding intellectual work. Daydreaming seems to follow an ultradian rhythm. Everyday consciousness can be characterised as consisting of many elements or aspects that are not "secondary-process or reality bound" (Singer & Pope<sup>9</sup>).**

These figures are averaged data and there is wide individual

variations. It is interesting to note that the frequency and duration of the rest phase of the ultradian cycle is almost identical with those of the REM sleep.

Recent sleep research indicates that many of the characteristics of REM sleep are parallel to those of wakefulness and that the electrical activity of the brain in REM sleep resembles that of wakefulness more closely than it does the other phases of sleep (Morrison<sup>10</sup>).

Prolactin is a hormone produced by the anterior pituitary. Stress and anxiety can cause an increase in prolactin blood level, leading to erectile dysfunction (Levy & Lightman<sup>11</sup>). Experimental research has confirmed that prolactin is secreted in a pulsate fashion that follows an ultradian rhythm (Veldhuis & Johnson<sup>12</sup>). These researchers have

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<sup>13</sup> Prank, K., Harms, H., Kayser, C., Brabant, G., Olsen, L., & Hesch, R. (1991). *Information transfer in hormonal systems*. In: E. Mosekilde & L. Mosekilde (Eds.) "Complexity, Chaos and Biological Evolution." New York: Plenum.

<sup>14</sup> Kaplan, H. S. (1979) "Disorders of Sexual Desire". New York: Brunner/Mazel

<sup>15</sup> Wyke, B. D. (1957). *Neurological aspects of hypnosis*. "Proceedings of the Dental and Medical Society for the Study of Hypnosis". Royal College of Surgeons, London.

<sup>16</sup> Wyke, B. D. (1960). *Neurological mechanisms in hypnosis*. "Proceedings of the Dental and Medical Society for the Study of Hypnosis". Royal Society of Medicine, London.

<sup>17</sup> Orr, W., Hoffman, H., & Hegge, F. (1974). *Ultradian rhythms in extended performance*. "Aerospace Medicine", 45, 995-1000

<sup>18</sup> Rossi, E. L. (1993). "The Psychobiology of Mind-Body Healing: New Concepts of Therapeutic Hypnosis". New York: W.W. Norton & Co.

<sup>19</sup> Arazo, D.L. (1982). "Hypnosis and Sex Therapy". New York: Brunner/Mazel.

<sup>20</sup> Wertz, D., Bickford, R., Bloom, F., & Shannahoff-Khalsa, D. (1981). *Selective Cortical Activation by Alternating Autonomic Function*. Paper presented at the Western EEG Society Meeting, February 12, Reno, NV.

<sup>21</sup> Nauta, W. J. H., & Feirtag, M. (1990). *The Organization of the Brain*. In: R. R. Llinas (Ed.), "The Workings of the Brain: Development, Memory and Perception". New York: W. H. Freeman and Co.

<sup>22</sup> Ornstein, R. (1986). "The Psychology of Consciousness". Penguin.

<sup>23</sup> Sperry, R. (1964). *The great cerebral commissure*. "Scientific American", 210, pp. 42-52.

demonstrated that prolactin has a pulse of approximately 14 per day and a duration of about 45 minutes.

Therefore, we can state that prolactin acts as a marker hormone of the ultradian rhythm. Disruptions of the ultradian rhythm exert their influence on the erectile function through this hormone, since both have prominent ultradian components and share the same regulatory neurobiological mechanism of the hypothalamic-pituitary-autonomic axis.

This does not imply erection is only possible every 60-120 minutes. There is a wide individual variation in terms of the frequency of the ultradian cycle and the duration of the rest phase. Moreover, men can develop erection at other times provided that enough sexual stimulation is given in an appropriate setting.

### Response to stress

The ultradian pulse of prolactin release is an averaged datum that does not follow the precision of biological clocks; it appears to be a complex mind-body system integrating adaptation with environmental signals (Prank et al.<sup>13</sup>; Veldhuis & Johnson<sup>12</sup>).

But how can we explain why disruptions of the ultradian rhythm (by stress or anxiety) can cause erectile dysfunction in some men but not in others? Kaplan<sup>14</sup> suggests a person's physical response to stress is as unique and unchanging as his or her thumbprint – some individuals will always react with muscle tension, others with increased stomach acidity and yet others with changes in the genital blood vessels. And the individual's specific response pattern determines which symptoms he or she may develop.

Wyke<sup>15,16</sup> showed that EEG changes identical to those of normal sleep could take place during hypnosis if specific suggestions for sleep were given.

So sleep is not necessary for erections to occur during hypnosis. It is due to the natural occurrence of the ultradian rhythm outside sleep as well.

Conflicts and stresses of different sorts create blocks interfering with the natural course of the ultradian rhythm (Orr et al.<sup>17</sup>), the normalisation of which can be facilitated by hypnosis (Rossi<sup>18</sup>). Through hypnosis natural physiological processes are freed to function normally (Arazo<sup>19</sup>).

The ultradian rhythm is regulated by the integration of autonomic and cerebral hemispheric activity (Wertz et al.<sup>20</sup>)

The term 'autonomic' is a misnomer, since this system is not self-governing at all. Its function is integrated with motivation and affect (Nauta & Feirtag<sup>21</sup>). Besides, the cerebral cortex and the autonomic nervous system influence each other through their integration with the limbic-hypothalamic system.

Through another operational pathway, normalisation of ultradian rhythm through the relaxing effects of hypnosis can undo the sympathetic/parasympathetic imbalance implicit supposedly in erectile dysfunction, creating a healthier autonomic activity and so allowing erection to take place.

### 2) Activation of the right (non-dominant) cerebral hemisphere, associated with increase in primary-process thinking

In his experiments, Ornstein<sup>22</sup> showed that each side of the brain takes to itself certain special mental functions: the left side of the brain concerning itself with language, number, criticism, logic, analysis; the right side more concerned with rhythm, colour, dreams, spatial awareness and imagination.

He states "If the left hemisphere can be termed predominantly analytic and sequential in its operation, then the right hemisphere is more holistic and relational and more simultaneous in its mode of operation."

The winner of the Nobel Prize for Medicine in 1981, Sperry, has conceptualised that each cerebral hemisphere embodies a different mind and that the two hemispheres function independently when the neural connections are served between them (Sperry<sup>23</sup>).

Hypnosis temporarily suspends the critical and logical thinking of the left-hemisphere and facilitate a shift toward the more imaginal and experiential thinking of the right-hemisphere. Activation of the right-hemispheric functioning is what makes hypnosis possible (Arazo &

## *Obsessive concern with adequate sexual performance is among the most common reasons for the persistence of sexual dysfunction*

<sup>24</sup> Araoz, D. L., & Bleck, R. T. (1991). "Sexual Joy through Self Hypnosis". California: Westwood.

<sup>25</sup> Fromm, E. (1992). *An Ego-Psychological Theory of Hypnosis*. In: E. Fromm and M.R. Nash (Eds), "Contemporary Hypnosis Research". New York: The Guildford Press.

<sup>26</sup> Rapaport, D. (1967). *States of consciousness: A psychopathological and psychodynamic view*. in: M. M. Gill (Ed.), "The Collected Papers of David Rapaport". New York: Basic Books.

Bleck<sup>24</sup>). Thus, to have an enjoyable and satisfactory sex life the right hemispheric thinking has to prevail. This is a major argument in favour of hypnosis in sex therapy.

Fromm<sup>25</sup> believes hypnosis functions to provide "regression in the service of ego".

### Performance anxiety

Obsessive concern with adequate sexual performance is among the most common reasons for the persistence of sexual dysfunction, including erectile dysfunction. Performance anxiety is associated with an excessive need to perform or to satisfy the partner, with little attention being paid to one's own pleasure and satisfaction.

Sex therapy aims to encourage people to perceive sex differently; as a source of joy and pleasure rather than a job or performance. Sex therapy emphasises that sexual activity is a total encounter of two human beings in a intimate and sharing situation, which is not always necessarily "great sex".

Thus, "regression in the service of ego" that occurs in hypnosis can have crucial relevance to the diagnosis and the therapy of sexual problems, including erectile dysfunction. Kaplan<sup>15</sup> proposes the concept of "regression in the service of pleasure". No mental "regression in the service of ego" or "in the service of pleasure" can take place without relinquishing the rational, logical, sequential mode of thinking – the "secondary-process thinking" of psychoanalysis (Rapaport<sup>26</sup>).

"Primary process- thinking" is essential in auto/hetero-hypnosis. This mode of thinking stresses imagery, not reason; openness to internal experiences, not logic; affect, not understanding – although ego functions of reason, logic and understanding are not fully suppressed.

As shown by extensive research, hypnosis assists people to regress and resort to a way of ego functioning in which deliberate control of internal experience, critical judgement and goal-oriented thinking are temporarily deactivated.

### Advantages of hypnosis and practical considerations

Erection occurring during trance is strongly indicative of the psychogenic basis of erectile dysfunction (unless it is due to the pelvic 'steal' syndrome, in which erection normally occurs but they disappears during coitus due to the extra demands of the gluteal muscles which 'steal' blood from penile arteries).

Hypnosis has obvious advantages over NPT and ICIP. There is no need for admission to hospital and it can be carried out on an out-patient basis. Besides, the costs of the procedure are much less and this is important when cost is a factor.

Less acclimatisation is required when using hypnosis on an out-patient basis as opposed to an inpatient NPT assessment and the effects of a changed environment on erection is less when the person is in trance.

**Hypnosis needs much less training than the various procedures of polysomnography and while ICIP must only be performed by doctors trained in this procedure and in the intrapenile administration of the antidote if priapism occurs, hypnosis can be performed by non-medical clinicians.**

Hypnosis is free of side effects and non-invasive. Appropriate suggestions given in trance can help initiate and enhance erection, which is not possible in NPT since erotic visual material can be used only prior to sleep (Tiefer & Melman)<sup>2</sup>.

Erection may persist for a while after coming out of trance. This can have the advantage of helping him see the psychogenic nature of the problem, appreciate it is temporary and show him he can master his sexuality. On the other hand, erection occurring during trance can encourage him to maintain and strengthen his erection by practising self hypnosis. The concept that hypnosis is really self-hypnosis is especially useful in sex therapy in order to help people regain mastery and control over an area of their life that feels beyond their power (Araoz)<sup>20</sup>.

27 Wein, A.J., Fishkin, R., Carpiniello, V.L., & Malloy, T. R. (1981). *Expansion without significant rigidity during nocturnal penile tumescence testing; a potential source of misinterpretation*. "Urology", 126, 343-344.

28 Shannahoff-Khalsa, D. (1991). *Lateralized rhythms of the central and autonomic nervous systems*. "International Journal of Psychophysiology", 11, 225-251.

29 Arya, U. (1979). *"Meditation and the art of dying"*. Honesdale, PA: Himalayan International Institute.

30 Friedman, D. (1988). *Assessing the basis of sexual dysfunction: diagnostic procedures*. In: M. Cole and W. Dryden (Eds.), "Sex Therapy In Britain". Milton Keynes.

Erection might manifest itself as an increase in the circumference of the penis without sufficient rigidity for vaginal entry (Wein et al.<sup>27</sup>). Therefore the person might need to be awakened during an NTP episode in order to assess the rigidity directly (Schiavi & Fisher<sup>6</sup>). However, waking the person in mid-NPT is not without its problems (Bancroft<sup>1</sup>).

Hypnosis has the advantage that the person can remain undisturbed, or less disturbed, in trance while his rigidity is assessed – due to the relaxing effects of hypnosis, which can be reinforced by giving him the appropriate suggestion to ensure minimal disruption.

Furthermore, assessment of erection during hypnosis better reflects the reality – and this provides an obvious advantage over NPT, as awakening the person can cause annoyance and disruption which might adversely affect erection, both in terms of circumference and/or rigidity.

Shannahoff-Khalsa<sup>28</sup> has suggested that an exploration of any mind-body state involving the autonomic nervous system could be undertaken safely and easily by shifting cerebral hemispheric dominance via the nasal breathing rhythm. Rossi's<sup>19</sup> favourite method for shifting hemispheric dominance is to simply lie down comfortably on one side.

Lying on the right side causes the right nostril to become congested, the left nostril opening within a few minutes. This reflexively tends to activate the right cerebral hemisphere, while lying on the left side activates the left cerebral hemisphere.

In his book, *Meditation and the Art of Dying*, Arya<sup>29</sup> describes an interesting relationship between the nasal cycle, sexual enjoyment and

orgasm and the highest states of bliss in 'samadhi'.

According to ancient yogic literature, both nostrils are open during sexual orgasm and during the deepest meditative states of 'samadhi'. He attributes the ecstasy of this form of meditation to "upward implosions ...of kundalini...so that celibacy becomes easier and more enjoyable than sex".

It remains for professionals dealing with sexual problems to assess these observations and validate their usefulness.

In the majority of cases the distinction between psychogenic and predominantly organic causes can be made by using hypnosis, in conjunction with the clinical history.

A psychological cause is likely if erection occurs: on awakening in the morning, in the absence of coital opportunity, in the presence of fantasy or when alone, with one partner but not with another. The sex drive may be absent or reduced and the onset is often sudden.

On the other hand, an organic cause is suspected if partial erection occurs during sexual activity with ejaculation and orgasm unaffected. The onset is likely to be gradual and the sex drive intact (Friedman<sup>30</sup>).

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**The Diagnostic Process**

This section is not supposed to be a protocol of how to use hypnosis to differentiate between organic and psychogenic causes of erectile dysfunction.

**Nevertheless, I recommend clinicians to consider the following points and make use of them when they implement this procedure:**

**1) Clinical History:**

<sup>31</sup> Waxman, D. (1989). "Hartland's Medical & Dental Hypnosis". London: Bailliere Tindall

<sup>32</sup> Fromm, E., Lombard, L., Skinner, S. H., Kahn, S. (1987-88) *The modes of the Ego in self-hypnosis. "Imagination, Cognition and Personality"*, 7(4), pp 335-349

<sup>33</sup> Bowers, P. (1978). *Hypnotizability, Creativity and the Role of Effortless Experiencing*, "International Journal of Clinical and Experimental Hypnosis", 26, pp. 184-202

<sup>34</sup> Kunzendorf, R. G. (1985-86). *Repression as the Monitoring and Censoring of Images. "Imagination, Cognition and Imagery"*, 5, pp. 31-39

<sup>35</sup> Hammond, D. C. (Ed.). (1990). *Handbook of Hypnotic Suggestions and Metaphors*. New York: W.W.Norton & Co.

<sup>36</sup> Beigel, H.G. (1980). *The hypnotherapeutic approach to male impotence*. In: H. G. Beigel, & W. R. Johnson (Eds.), "Application of Hypnosis in Sex Therapy". Springfield, Illinois: Charles C Thomas.

Clinical history is of paramount importance. Therefore a detailed medical and psychiatric history should be taken before proceeding with this hypnotic procedure.

Referral to a medical doctor should be arranged if indicated.

## 2) Explanation of the hypnotic procedure:

Before starting the hypnotic procedure, I explain its nature and objective and answer any questions the patient might have. The language I use is simple and free of jargon. Complicated explanations are avoided.

For example, I tell the patient that anxiety about performance and the difficulty to relax during the sexual encounter can lead to problems with erection and I explain that hypnosis can be used to help him relax and to focus on the pleasant sensations arising in his body when he is in this state of relaxation. I find that this simple explanation is enough in most cases.

## 3) The hypnotic procedure can be detailed under the following subheadings:

**a) Imagination and Induction:** I use a submodalities overlapping technique (Araoz<sup>19</sup>) to engage the subject in imagery activity.

This imagery is important to encourage and emphasise experiential and non-critical thinking as opposed to judgmental and logical thinking.

Once the subject has become engaged in vivid imagination, I proceed with the induction. The imagery exercise is indeed part of the preparation for hypnosis. Induction begins by suggesting a comfortable and relaxed position, closing of the eyes and the listening to the hypnotist's voice. One may suggest attention to the patient's breathing or start immediately by the inner representation of a pleasant and safe scene.

**b) Deepening of trance:** I then follow on with trance deepening techniques. There are various

methods of deepening and there is no experimental research to suggest one is more effective than another. A particularly effective method however is "Vogt's Fractionation technique" (Waxman<sup>31</sup>), the essential feature being the repeated hypnotising and awakening of the subject in rapid succession.

The reason for deepening of trance is implicit in the experimental research that has been performed by Fromm et al. and other workers. In her work with her colleagues, Fromm<sup>32</sup> introduced the concept of "ego activity" and "ego receptivity" as ego modes in self hypnosis. Ego activity is defined as "*decision making, goal-directed activity, sequential logical reasoning... and the erection and maintenance of defences*". Ego receptivity is defined as "*a mode in which deliberate control of internal experience, critical judgement and goal-directed thinking are temporarily relinquished*".

This work established that "*subjects who become deeply absorbed in hypnosis tended to exhibit higher levels of ego receptivity and diminished ego activity*". The mode of receptivity is very similar to what Bowers<sup>33</sup> calls "*effortless experiencing*", which she showed as an important aspect of hetero-hypnosis. This mode of thinking is relevant to sexual functioning. The same work by Fromm and her colleagues showed a strong correlation between ego receptivity and primary process thinking. Kunzendorf<sup>34</sup> draws a similar conclusion about hetero-hypnosis.

**c) Suggestions:** In addition to the suggestions used in induction, I use other suggestions and/or metaphors to improve sexual fantasy, increase sensual awareness and correct negative mental attitudes (Hammond<sup>35</sup>, Araoz<sup>19</sup>). As Araoz states, all suggestions must be ego-syntonic and idiosyncratic, based on what the client has revealed initially. I am disinclined to use direct suggestions to induce erection. However, Beigel<sup>36</sup> stresses their value in the differentiation between the psychogenic and organic causes of erectile dysfunction.

**d) Other hypnotic techniques can be used to induce erection:** I prefer the use of two

techniques.

The first are ego states technique (Watkins<sup>37</sup>). In the ego states therapy, I invite the person to visualise the symptomatic self negotiating or fighting with the non symptomatic self, the latter overpowering the former.

Sub-modalities and overlapping can be used again to strengthen a weak non symptomatic or weaken the symptomatic self, before engaging the two selves in a negotiation or a fight.

The second technique is finger catalepsy (Araoz<sup>19</sup>). This technique is commonly used by most hypnotherapists who deal with sexual problems.

The following is a brief description of the technique. The patient vividly imagines his finger becoming hard like a steel bar to achieve hypnotic catalepsy. Then suggestions run along these lines: "As your finger has become hard and rigid ... so your penis will feel more stiff and hard ... hard erection ... such a pleasant enjoyable surprise ...".

These techniques are accompanied by ego strengthening methods, because of the damage to the self-image that the problem has usually caused.

**e) self-hypnosis:** I usually teach the subject self hypnosis and provide him with a tape to practise at home between sessions.

There are many methods of self-hypnosis. I describe one method only. The subject is instructed to sit or lie comfortably, close the eyes and roll them up into his head. He focuses on his breathing and repeats the word "relax" on each exhalation.

The subject in hypnosis gives himself

suggestions to improve his self-image, to change his negative attitudes and/or to help him focus on positive sensual feelings.

I recommend that he practises self-hypnosis twice a week at least; the more he does it the greater impact it will have on his sex life (for more details and scripts, see Araoz & Bleck<sup>24</sup>).

**f) Number and duration of sessions:** The number of session I use before deeming the procedure a failure is usually five.

Failure is defined as the absence of erection of sufficient rigidity during hypnotic sessions with the clinician or at home. Sessions are weekly, one hour per visit.

The procedure is carried out on a weekly basis to allow the subject to practise self-hypnosis. Increasing the number of sessions should not entail harmful delay. It is important that clinicians using hypnotherapy to deal with sexual problems should have a comprehensive knowledge of sex therapy.

The number of sessions here is based on Crasilneck's<sup>38</sup> report on the treatment of patients with erectile dysfunction by hypnosis.

Crasilneck's outcome rate at 12 month follow-up for his last 100 consecutive patients treated was 87 per cent with an average of 10 sessions.

**The return of good erectile function usually occurred after the fifth hypnotic session.**

If after five sessions or so the subject does not show significant erection, other diagnostic procedures can be used. However, the subject can continue practising self hypnosis to enrich his sexual and personal life.

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<sup>37</sup> Watkins, J. (1978). "The Therapeutic Self". New York: Human Sciences Press.

<sup>38</sup> Crasilneck, H. B. (1982). A follow-up study in the use of hypnotherapy in the treatment of psychogenic impotency. "American Journal of Clinical Hypnosis", 25(1), 52-61.

**g) Confirmation of erection:** The patient is asked to signal in hypnosis that erection has occurred.

Suggestions are made to this effect: "*As soon as you develop a strong erection, your left index finger will also rise...*".

He may also be asked to find out for himself manually. Alternatively, the clinician may reawaken the patient and ask him to check for himself. The clinician (if medically qualified) can assess erection directly, provided the patient has given his consent.

**h) Lying position:** As stated above, the right cerebral hemisphere can be activated when lying on the right side. Therefore it is advisable to have the patient lie on his right side.

I usually ask the patient to lie on his right side, although I give him the permission to change or adjust his position whenever he likes. It is pointless to insist on this position if this is not feasible.

**i)** If the outcome of the procedure shows that the problem is of psychogenic origin then sex therapy is usually required, which can be in the form of hypnotherapy and/ or traditional sex therapy. I tend to combine both methods.

**j)** During the diagnostic period a ban on sexual intercourse is indicted in order to reduce performance pressure. This proves useful in my experience, using this method for diagnostic and not for therapeutic reasons.

#### 4) Issues of relationship:

Sexual problems may be associated with relationship difficulties. Therefore any procedure aiming at assessing or treating sexual problems should where possible include the partner, as the relationship can have a major impact on initiating or maintaining the sexual problem. However I tend to use hypnosis for diagnostic procedures on an individual basis. This practice is in accordance with that of Crasilneck<sup>39</sup>.

The partner is usually included when the outcome of the procedure, within the first five sessions or so, indicates a psychogenic origin of the problem. I tend, if possible, to involve the partner prior to hypnosis, in case I go on to use hypnosis as a therapeutic tool when it comes to sex therapy also

## A Case Illustration

I saw Peter, a 29-year-old teacher, because of secondary erectile dysfunction of six months duration. The problem started suddenly after he broke up with his girlfriend, with whom he had had an enjoyable sex life, due to a financial dispute. He came to see me as he had started going out with another women and was, understandably, very keen on regaining his potency. He did not wake up with a strong erection. He was not clinically depressed. He was bright and had a warm personality.

Peter had been smoking 30 cigarettes a day for nine years. His consumption of alcohol was negligible. The medical and psychiatric history was devoid of any significant illness. There was little or no erection on masturbation. Masturbation was infrequent, not enjoyable and not combined with sexual fantasies. Ejaculation was unaffected.

He reported that he was on no medication and that he had not been abusing drugs. He had not seen his family practitioner because he thought his problem would not be taken seriously.

### Session 1)

I began by taking a thorough case history. Then I pointed out the importance of confirming whether his problem had a psychogenic or organic cause and told him I was intending to use hypnosis for this purpose.

In the final part of this session I invited him to engage in imaginary activity. Since he was fond of horticulture it was easy for him to use his preferred representational system (olfactory) to recall the pleasant scent of flowers. Overlapping was used to introduce other representational systems. The imagery activity made him more receptive to suggestion and he entered into a deep trance.

I then gave him suggestions for enhancing erotic fantasy and increasing sensual awareness. A ban on sexual intercourse was issued, although there was no evidence that he was going to risk trying it because of his sexual problem.

### Session 2)

While he was in trance I taught him self-hypnosis and gave a post hypnotic suggestion to practise it at home at least twice weekly. Ego strengthening suggestions were added to enhance his self-image. He was instructed to raise his left index finger if erection occurred. A hypnotic tape was also issued for reinforcement of these suggestions.

<sup>39</sup> Crasilneck, H. B. (1990). *Hypnotherapy with Psychogenic Impotence*. In: D. C. Hammond (Ed.), "*Handbook of hypnotic suggestions and metaphors*". New York: W.W.Norton & Co.

### Session 3)

In this session, he reported that self hypnosis was relaxing and enjoyable. I used the finger catalepsy technique. In addition, I used the garden hose metaphor (Luckcock<sup>40</sup>): *"Percy the gardener was having a problem with his garden ... his dahlias were not blooming ... When he reached for his hose, he found it limp and flaccid ... He was puzzled ... his lover, Rose, was in the kitchen ... cooking up something special for him ... his favourite dish ... It made his mouth water ... just to think about it ... The solution came to him ... his water tap was not turned on ... He called Rose to turn it on ... For a moment nothing happened ... his hosepipe was lifeless ... but then ... he could feel the water surging through his pipe ... swelling the elastic ... thrusting the hose up ... right into the air ... hard and rigid ... He was ecstatic, as water sprayed over his dahlias ... the smell of food entranced him ... so much ... he couldn't wait to get inside to enjoy his meal ..."*

<sup>40</sup> Luckcock, R. (1994). *Personal communication*

<sup>41</sup> Chiba, Y., Chiba, K., Halberg, F., & Cutkomp, L. (1977). *Longitudinal evaluation of circadian rhythm characteristics and their circadian modulation in an apparently normal couple*. In: J. McGovern, M. Smolensky, & A. Reinberg (Eds.), *"Chronobiology in Allergy and Immunology"* (pp. 17-35). Springfield, Il: Charles C. Thomas.

<sup>42</sup> Leonard, G. (1981). *"The Silent Pulse"*. New York: Bantam.

### Session 4)

Peter declared he had broken the ban on sexual intercourse and had sexual intercourse on two occasions.

### Discussion

This case teaches us at least two lessons.

**Firstly, erection took place at home and not in my office. This was quite immaterial for the sake of diagnosis.**

**Secondly, although the hypnotic procedure was used for diagnostic reason, the therapeutic impact was obvious.**

For the sake of completion, I might mention that I saw the couple on four subsequent sessions. They were quite happy with the sexual aspect of the relationship and I focused mainly on relationship issues; Peter was worried about the possibility that his partner might move to another city to further her career. Peter enjoyed self-hypnosis and continued to practise on a regular basis. His partner requested that I also teach her self hypnosis.

## Biological rhythms and relationship issues

The significance of the ultradian rhythm, together with other normal biological rhythms such as the circadian rhythm, has even more far-reaching implications, since they all influence the consciousness and behaviour of couples in the area of sexual and hunger appetites, sleep patterns and so on.

Ultradian and circadian research suggests that partners who work, eat and sleep together find that their biological rhythms are *"in sync"*, so that they are often in the mood to make love together as well.

**When partners are stressed so that their rhythms of work, eating and sleeping are askew, their relationship can suffer greatly (Chiba et al. <sup>41</sup>).**

Leonard<sup>42</sup> has described relationship exercises that have been used to synchronise rhythms. However, a more elaborate discussion of this matter, particularly its therapeutic implications on sex and relationship issues, is beyond the scope of this paper and the interested reader can find more about that in these two references.

## General implications for sex therapy

As shown above, hypnosis can perform its diagnostic role to ascertain the organic or psychogenic nature of erectile dysfunction through the facilitation of a shift towards right cerebral hemispheric dominance and primary process modes of thinking and the normalisation of the ultradian rhythm.

Thus it is obvious that if hypnosis is to be used in the therapy of psychogenic sexual problems, including erectile dysfunction, then the significance of the aforementioned mechanisms is considerable.

**This becomes even more obvious if we appreciate the fact that the aetiological factors operating in psychogenic erectile dysfunction are of the same nature as those causing other psychogenic sexual problems.**