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Virilex

Summary （概要）

Virilex is designed to enhance male sexual performance by providing neurotransmitter precursors for the important neurotransmitters associated with normal male sexual performance. Virilex has been shown to increase the quality of the penile erection, enhance the quality of orgasm and reduce the latency between successive erections. Virilex increases the production of both nitric oxide and acetylcholine the important neurotransmitters involved in normal penile function. In addition, Virilex provides a non-pharmaceutical alternative to inhibition of cyclic GMP degradation that is the mechanisming the pharmaceutical approach.

Virilex は男性の性機能に関連する重要な神経伝達物質の前駆物質を供給することで、性機能を向上させるようにデザインされました。Virilex は勃起力を向上させ、オルガズムの感度を高め、最初の勃起が終了してから再度勃起するまでの時間を短縮します。Virilex は正常なペニスの機能に関わる重要な神経伝達物質である、一酸化窒素とアセチルコリンの合成を増進します。さらに、薬学的アプローチによるサイクリック GMP 低下の抑制を、Virilex は非医薬での選択肢として可能にしました。

Neurotransmitters and Normal Penile Function
ニューロトランスミッターと正常のペニスの機能

In order to establish and maintain an erection, several neurotransmitters must be provided to the arterial and venous structures of the penis1-15. The primary neurotransmitters that operate to dilate penile arteries and constrict penile veins are nitric oxide10; 11; 16-38 and acetylcholine39-45. Both nitric oxide and acetylcholine function to increase intracellular GMP. Inhibition of GMP degradation is an important treatment for various forms of erectile dysfunction12; 15; 30; 46-69. The pharmaceutical sildenafil functions by inhibiting GMP10; 14; 50; 52; 53; 56; 69-84. Thus, activation of nitric oxide, activation of acetylcholine, inhibition of norepinephrine, and inhibiting GMP are necessary for production and maintenance of erection.

勃起してそれを維持する為には、ペニスの動脈と静脈に数種類の神経伝達物質を供給しなければなりません。ペニスの動脈を拡張し、静脈を縮小する主要な神経伝達物質は一酸化窒素とアセチルコリンです。一酸化窒素もアセチルコリンも細胞内 GMP を増大させる機能があります。GMP 低下の抑制という方法は様々な種類の勃起不全に対する重要な治療方法です。薬剤のシルデナフィルは GMP を抑制する機能があります。つまり、一酸化窒素を活性化し、セチルコリンを活性化し、ノルエピネフリンを抑制し、GMP を抑制することが勃起を成立させ維持するのに必要なのです。

Erectile Dysfunction
ED、勃起不全

Erectile dysfunction, sometimes called "impotence", is the repeated inability to establish or maintain an erection firm enough for sexual intercourse. The word "impotence" may also be used to describe other problems that interfere with sexual intercourse and reproduction, such as lack of sexual desire and problems with ejaculation or orgasm. Using the term erectile dysfunction makes it clear that the other problems of sexual dysfunction are not involved with ED.
勃起不全はインポテンスとも呼ばれ、セックスをするに十分な固さを維持して勃起することができない状態を言います。インポテンスと言う言葉は別の問題つまり、セックスに対する欲求不足や射精、絶頂に伴う問題を指す場合もあります。ここでいう勃起不全の定義では、その他の性交障害には ED を伴ったものではないことを明確にしておきます。

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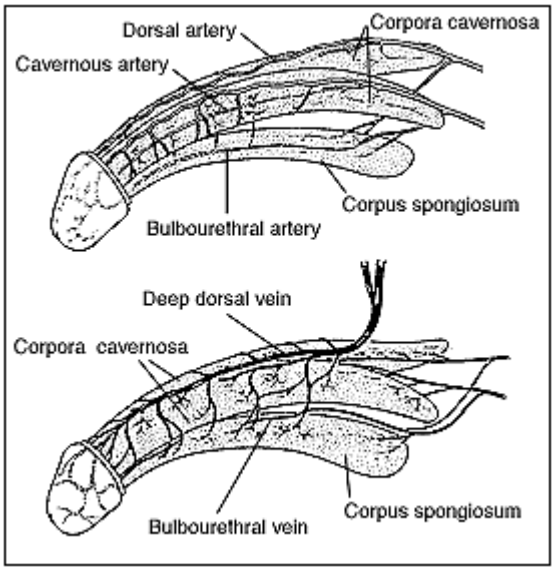
Erectile dysfunction, or ED, can be a total inability to achieve erection, an inconsistent ability to do so, or a tendency to sustain only brief erections. These variations make defining ED and estimating its incidence difficult. Estimates range from 15 million to 30 million Americans, depending on the definition used. According to the National Ambulatory Medical Care Survey (NAMCS), for every 1,000 men in the United States, 7.7 physician office visits were made for ED in 1985. By 1999, that rate had nearly tripled to 22.3. Data on new drugs show an estimated 2.6 million mentions of Viagra at physician office visits in 1999, and one-third of those mentions occurred during visits for a diagnosis other than ED.

勃起不全もしくは Ed **というのは、完全に勃起に至らない、勃起したりしなかったりする、時々短い時間だけ勃起する等の症状を指しています。こうした様々な** ED **の症状は** ED **と断定することやその発症の予測を困難にしています。定義によって変わってきますが、アメリカに** 1500 **万人から** 3000 **万人の** ED **の症状の人がいると見積もられています。**NAMCS **の調査によりますと、**1985 **年には** ED **の相談で医師を訪問した人は、アメリカにいる** 1000 **人の男性中** 7.7 **人しかいなかったことが報告されています。**1999 **年までにその率は約3倍の** 22.3 **人になりました。新薬におけるデータによると** 1999 **年に医師を訪問した患者の約** 260 **万人がバイアグラのことを聞いています。そしてその内1／3の患者は** ED **ではなく健康診断で訪れた時に聞いているのです。**

In older men, ED usually has a physical cause, such as disease, injury, or side effects of drugs. Any disorder that causes injury to the nerves or impairs blood flow in the penis has the potential to cause ED. Incidence increases with age: About 5 percent of 40-year-old men and between 15 and 25 percent of 65-year-old men experience ED. But it is not an inevitable part of aging.
高齢の男性における ED **は通常、病気、怪我、薬の副作用などによる身体的な原因があります。神経の損傷が原因の病気、ペニスの中の血液の循環が阻害されるような病気は、潜在的に** ED **を引き起こす可能性があります。年を追う毎に発症は増え、40歳で5%、65歳で15～25%が** ED **を経験しています。しかしこれは年令とともに訪れる必然的なものではないのです。**

ED is treatable at any age, and awareness of this fact has been growing. More men have been seeking help and returning to normal sexual activity because of improved, successful treatments for ED. Urologists, who specialize in problems of the urinary tract, have traditionally treated ED; however, urologists accounted for only 25 percent of Viagra mentions in 1999.
ED **はどんな年令でも治療可能で、そしてこの事実に多くの人が気付き始めています。**ED **に対する治療が進歩し成功した為、以前よりも多くの男性が助けを求め、そして正常な性機能を取り戻しています。尿道の問題の専門家である泌尿器科の医師は古典的な方法で** ED **を治療してきましたが、**1999 **年の時点ではたったの25%の泌尿器科の医師がバイアグラの存在を患者に説明しているにすぎません。**



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The penis contains two chambers called the corpora cavernosa, which run the length of the organ. A spongy tissue fills the chambers. The corpora cavernosa are surrounded by a membrane, called the tunica albuginea. The spongy tissue contains smooth muscles, fibrous tissues, spaces, veins, and arteries. The urethra, which is the channel for urine and ejaculate, runs along the underside of the corpora cavernosa.
Erection begins with sensory or mental stimulation, or both. Impulses from the brain and local nerves cause the muscles of the corpora cavernosa to relax, allowing blood to flow in and fill the spaces. The blood creates pressure in the corpora cavernosa, making the penis expand. The tunica albuginea helps trap the blood in the corpora cavernosa, thereby sustaining erection. When muscles in the penis contract to stop the inflow of blood and open outflow channels, erection is reversed.
Since an erection requires a precise sequence of events, ED can occur when any of the events is disrupted. The sequence includes nerve impulses in the brain, spinal column, and area around the penis, and response in muscles, fibrous tissues, veins, and arteries in and near the corpora cavernosa.

ペニスは陰茎海綿体と尿道海綿体およびそれに続く亀頭がありますが、勃起に関係するのは陰茎海綿体 (corpora cavernosa) で左右に 2 本あります。陰茎海綿体は膜 (tunica albuginea) で被われています。海綿体は平滑筋、繊維状組織、空間、動脈、静脈が含まれています。排尿と射精に使用される尿道は陰茎海綿体の下側に沿って走っています。勃起は感覚もしくは精神的な刺激、又はその両方で始まります。脳や神経からの刺激で陰茎の海綿体の平滑筋の筋弛緩がおこり、その結果陰茎海綿体の血流増加が起こり空間を埋めるのです。陰茎海綿体の中で、血液が圧力になりペニスを増大させるのです。陰茎海綿体を被う膜が陰茎海綿体の中から血液を逃がさないようにして勃起を維持させます。平滑筋が流入する血液の流れを止め、流出を促した時に勃起は終わります。
勃起は正確な一連の手順を必要としますので、手順の一つでも欠けると ED が起こりうるのです。手順とは、脳、脊柱、ペニス周辺の神経からの刺激、そして筋肉、繊維状組織、静脈、陰茎海綿体周辺の動脈からの反応を含みます。

Damage to nerves, arteries, smooth muscles, and fibrous tissues, often as a result of disease, is the most common cause of ED. Diseases--such as diabetes, kidney disease, chronic alcoholism, multiple sclerosis, atherosclerosis, vascular disease, and neurologic disease--account for about 70 percent of ED cases. Between 35 and 50 percent of men with diabetes experience ED.

神経、動脈、平滑筋、繊維状組織へのダメージ、よく起こりうる病気 (糖尿病、腎臓病、慢性のアルコール中毒、多発性硬化症、動脈硬化、心臓病、神経病) の結果、これらは ED 原因の７０%を占めています。その中でも糖尿病患者の３５～５０%は ED を経験しています。

In addition, many common medicines--blood pressure drugs, antihistamines, antidepressants, tranquilizers, appetite suppressants, and cimetidine (an ulcer drug)--can produce ED as a side effect.

加えて、多くの一般的な薬、血圧抑制剤、抗ヒスタミン剤、抗うつ剤、トランキライザー、食欲を抑える薬、胃潰瘍の薬、等は副作用として ED を引き起こす可能性があります。

Experts believe that psychological factors such as stress, anxiety, guilt, depression, low self-esteem, and fear of sexual failure cause 10 to 20 percent of ED cases. Men with a physical cause for ED frequently experience the same sort of psychological reactions (stress, anxiety, guilt, depression).

専門家は、ストレス、心配、罪悪感、落ち込み、蔑んだ自尊心、セックスを失敗するのではないかという恐れ、といった心理的要因が、１０～２０%の ED 原因になっていると信じています。身体的原因を持つ ED 患者は、頻繁にこう言った心理的要因を経験しています。

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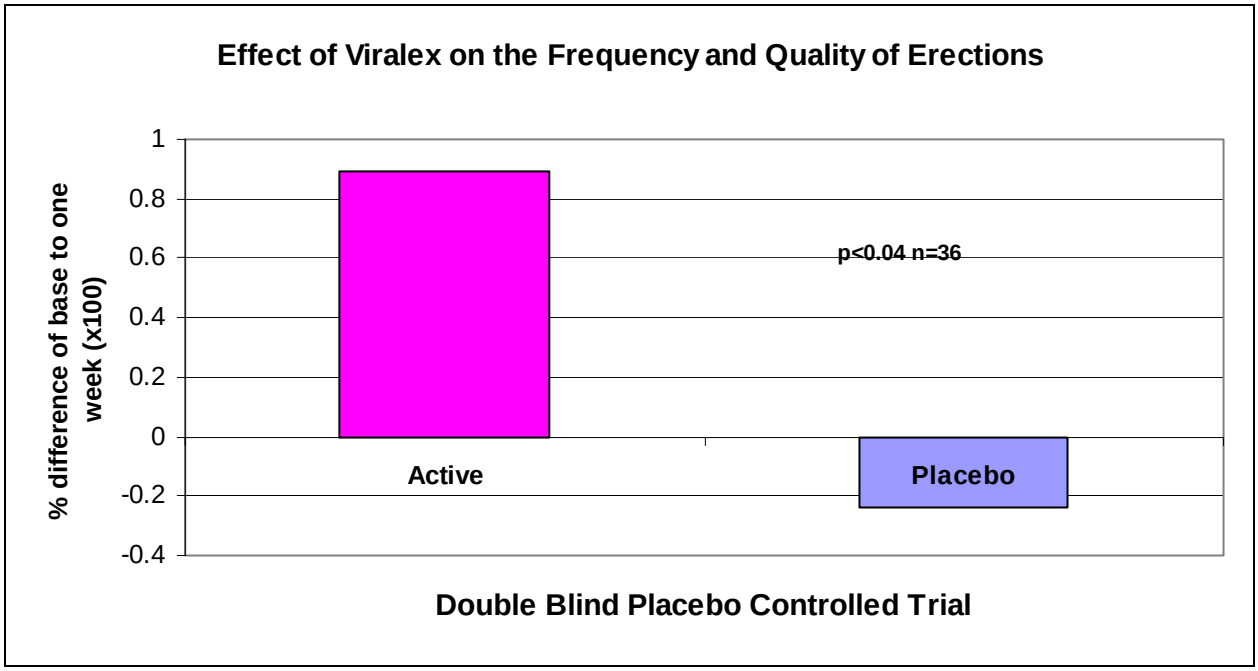
Virilex contains precursors to nitric oxide and acetylcholine. In addition, Virilex contains a non-herb inhibitor of the phosphodiesterase that destroys GMP. The inhibition of this enzyme results in the increased concentration of GMP that is produced by the release of nitric oxide.

Virilex **には一酸化窒素とアセチルコリンの前駆物質が含まれており、**GMP **を破壊する酵素を抑制するハーブ以外の成分が含まれています。この酵素を抑制することで、一酸化窒素の放出によって作られる** GMP **の濃度が上がるのです。**

There have been four double-blind placebo controlled trials of Virilex. In double –blind placebo controlled trials, Virilex showed an increased frequency and quality of erections.

Virilex **のダブルブラインドテストを四回実施しました。そのテストにおいて、**Virilex **によって勃起の質と頻度が向上したことを証明しています。**

勃起の質と頻度に対する Viralex **の効果**



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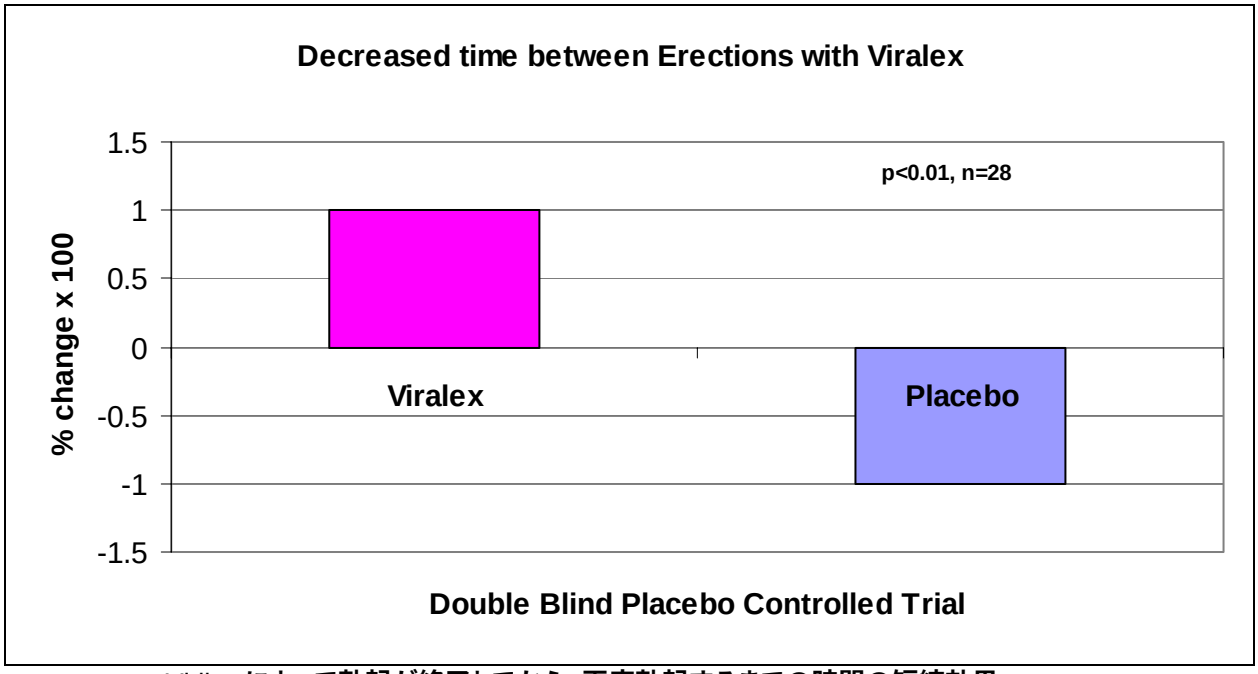
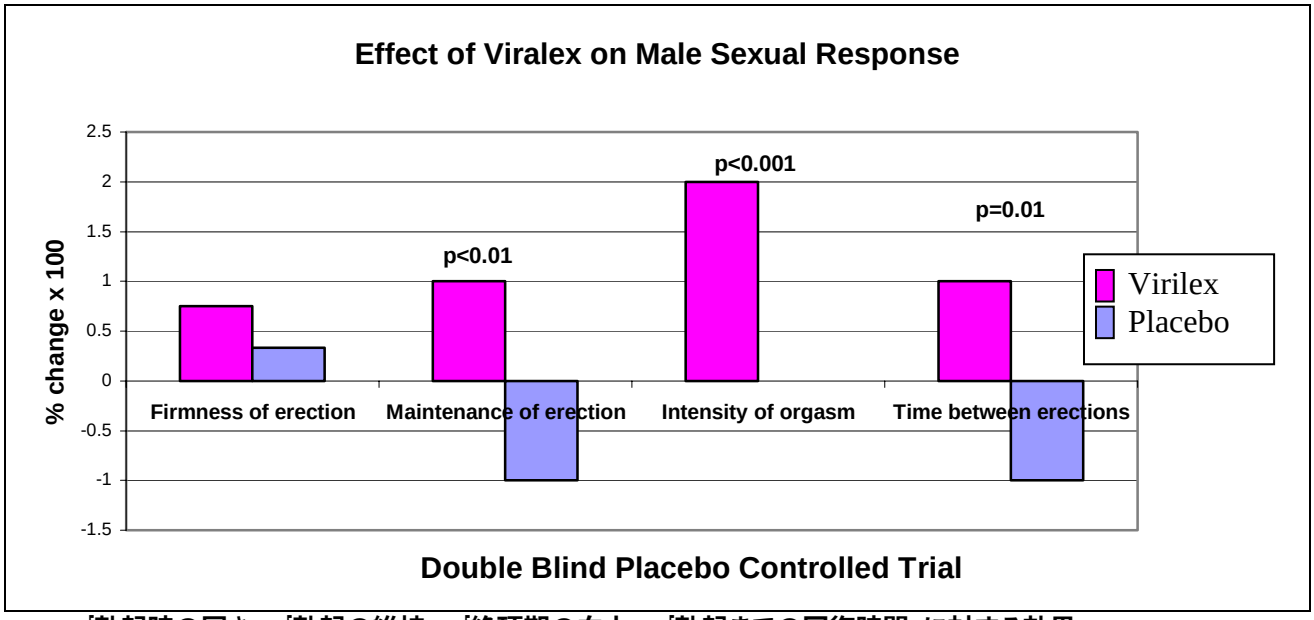


Virilex によって勃起が終了してから、再度勃起するまでの時間の短縮効果



「勃起時の固さ」、「勃起の維持」、「絶頂期の向上」、「勃起までの回復時間」に対する効果

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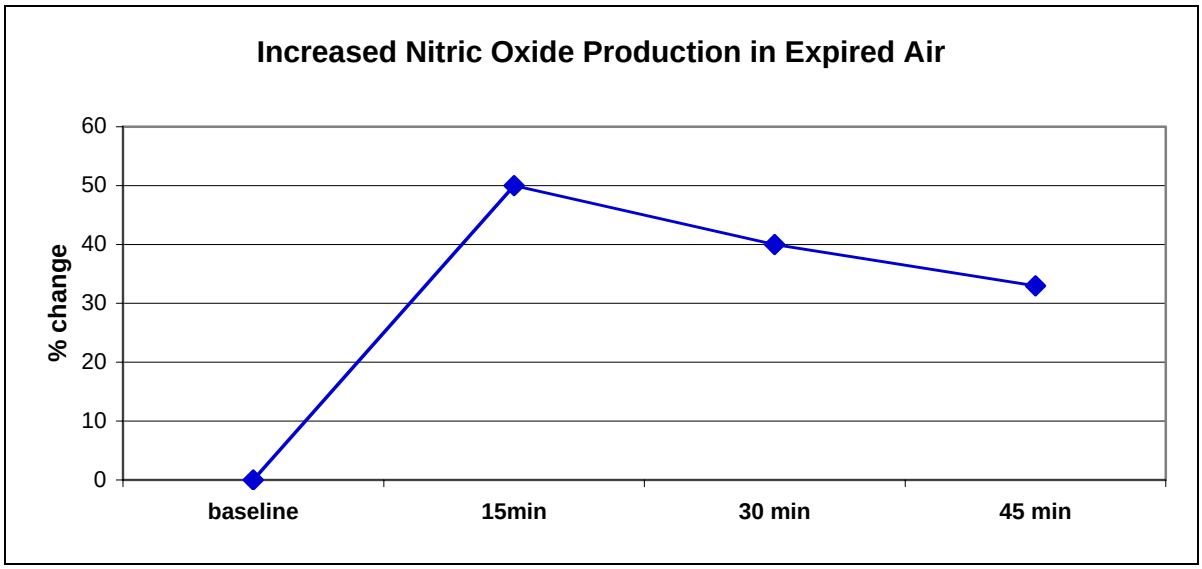
Arginine and Nitric Oxide
アルギニンと一酸化窒素

Nitric oxide is produced in the cell from arginine, the amino acid precursor11;21;25;85-96 Virilex increases nitric oxide production. Arginine administration increases nitric oxide production. Arginine administration enhances penile function. Arginine deficiency is common.
一酸化窒素は細胞の中でアミノ酸前駆物質のアルギニンから作り出されます。Virilex **は一酸化窒素の合成を高めます。アルギニンの供給は一酸化窒素の合成を高めます。アルギニンの供給はペニスの機能を高めます。アルギニンの欠乏は非常によくある問題です。**



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