

Original Research Article

A Biologic Influence on the Integrity of the Natural Desire, Sense of Libido and Sexual Drive

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ABSTRACT

The study aimed to demonstrate possible underlying environmental reasons for the decreased sexual properties such as sexual desire, libido and sex drive together with illustration of the healthy benefits of some simple biological supplements on these important sexual features.

Decline of sexual desire, sense of libido (pleasure sensation) and effect of sex drives among different age groups in both sexes have been apparently demonstrated during latest years. Pelvic congestion should be part of the pathophysiology behind decline of the natural desire and pleasure sensation via direct effect or local reflexes.

Nitric oxide (NO) is an intelligent element in maintaining the integrity of sexual health, desire and pleasure sensation via encouragement of micro-vascular inflow. Probiotics and natural gut bacteria can support brain, liver and heart functions as well as improving mood and sexual functions.

Twenty volunteer couples positive for *Helicobacter pylori* dyspepsia and unsatisfied for sexual pleasure were selected in two age groups; young and older age groups. They were studied for the healthy effects of pelvic decongestion via natural colon clear, vinegar therapy and probiotic supplements.

Marked improvement and most volunteers rather recovered their usual sexual lifestyle and pleasure satisfaction.

Regular colon clear, vinegar therapy and probiotic supplements are beneficial for general and sexual health and should be integral elements of any individual style of life.

Key words: libido, Probiotics, sexual desire, sex drive, vinegar therapy.

INTRODUCTION

Sexual health is part of individual health; even a healthy sexual life is integral for mood and individual daily life performance. Decline of sexual desire, sense of libido (pleasure sensation) and effect of sex drives among different age groups in both sexes have been apparently demonstrated during latest years. Investigators work to improve these functions but they are really missed the success to investigate for the reasons behind drop of these vital properties. ^[1,2]

Although colonic health and function is not the glamorous subject, yet the traditional medical guidelines emphasize that the colon is a source of illness and its integral function is most important for individual's well-being, health and fitness. ^[1-3]

Pelvic congestion has been demonstrated to play an obvious role in erectile dysfunction to the extent that elimination of pelvic congestion by simple traditional measures such as colon clear and blood-let out cupping therapy opposite the

lower back helped to markedly improve erectile function among young and old age groups; [3] pelvic congestion should be in the same way part of the pathophysiology behind decline of the natural desire and pleasure sensation via direct effect or local reflexes.

Pelvic congestion syndrome with its different clinical symptoms and presentations had been reported in literature and was found to be influenced by many factors whether in males or females. [3,4]

Sex hormones; testosterone and estrogen, are responsible for sexual functions in both sexes in addition to further different valuable functions. Factors whether natural, chemical or medicinal that improve the peak of these two hormones would in turn improve sexual functions. [5,6] Nitric oxide (NO) is an intelligent element in maintaining the integrity of sexual health, desire and pleasure sensation via encouragement of micro-vascular inflow. As concerns general and sexual health, sex hormones and NO are having impact on each other via vascular circulatory and vascular endothelial influence. [7,8]

As much as probiotics and natural gut bacteria can support brain, liver and heart functions; it can also improve mood and sexual functions. Lactobacilli; the bacteria of sour yoghurt and acid butter milk could be as well integrative for considerable part of health and physical fitness. [9,10] NO formation in the gut could be an important aspect of the human body nitrate/nitrite metabolism which constitutes in turn an additional bacterial benefit related to diet and health. [11] Contrary to what is sometimes considered hypothetical, vinegar could contribute to improve sexual desire and libido by natural boosting of NO through food. [12]

Aim: Demonstration of possible underlying environmental reasons for decreased sexual properties such as sexual desire, libido and sex drives together with illustration of the healthy benefits of some simple biological supplements on these important sexual features.

Design & Settings: A prospective study done in Balghsoon Clinics in Jeddah/Saudi Arabia between May 2014 and October 2015.

PATIENTS & METHODS

Twenty volunteer couples who were unsatisfied for more than one year as concerns the frequency of their sexual desire and meetings, their pleasure sensation and/or the response to the sex drive of one partner to the other. The volunteers were selected and included in the study so as to be divided into two equal groups; a younger age group under 35 years of age and an older age group above 50 years until 55 years old. The desire, the frequency of their meeting in bed and the response of one to the other was rather once every two weeks or a little less than two weeks; a frequency which should be considered unusual for the younger age group. Every individual in the study was made free to decide his own personal score from 1-10 to express the decline in his pleasure sensation than he used to, and the range of improvement, if any, after 6 months of the natural/nutritional therapy of this study.

As all patients were having frank dyspepsia, colonic troubles and marked constipation; the natural senna leaves extract purge was employed monthly with gradual reduction of its dose in order to correct the symptomatic colonic upsets of patients. In addition, they followed a vinegar-mixed salad among principal meals, once or twice daily, 3-5 days per week. [4,13] They were requested to take 1/3 of a glass of acid butter milk, once or twice daily, 3-5 days a week, in addition to one whole glass at bed time for 3-5 days per week also. [9,10]

RESULTS

All volunteers became free of their dyspeptic symptoms, colonic upsets and constipation. Patients started to observe improvement in their sexual properties starting from the third to fourth week of the study. The overall improvement between the second and sixth month was marked; the

average frequency of spontaneous desire was 3-5 times per week for both groups that resulted in satisfactory sexual meeting once or twice per week. Pleasure sensation was improved to a personal score of 7-8 from 10 as compared to the original sensation that was experienced one year before the study. Morning congestion/morning engorgement or at wake up times with semi-erection or complete erection and desire to make intercourse was encountered 3-4 times per week in most volunteers (81& 90% among older and young age groups respectively). Hard erection during sleep and at wake up times was occasionally encountered (once or twice/week) as expressed by some of them even among those of the older age group. Response to verbal or manual sex drives by the partner was positive in most of the times (75& 83% among older and young age groups respectively). "In many instances I can feel spontaneously erotic", "It is becoming easy to turn the partner responsive", "Yes, love play is lovely and helpful but too much love play is not necessary now anymore"; these were individual comments by some volunteers of the study.

ETHICAL CONSIDERATIONS: An informed signed consent was taken from all patients, they were made aware about safety of the natural colon clear remedy and vinegar therapy employed for them; they were free to quit the study whenever they like. The research proposal was approved and the study followed the rules of the Research Ethics Committee of Balghsoon Clinics in Jeddah, Saudi Arabia.

DISCUSSION

Unsatisfied sexual life is lately a common occurrence among different age groups and its incidence is expected to increase along with the increase in various lifestyle diseases, civilization and different changes involving the routine of life. It constitutes an increasing obvious phenomenon during latest decades; the reasons of spreading of this phenomena

lately even among younger population are obscure to explain. [14] As people grow older, sexual and non-sexual symptoms of sex hormone deficiency can negatively affect the quality of life and cause considerable general health concerns but should not be among young age generations and not in such fast sequence of events. [15]

Pelvic congestion could be a consequence of accumulation of ammonia in the colon due to the fermentation process by gut bacteria; [4,13] pelvic congestion was demonstrated to be a major reason for developing several presentations of sexual dysfunction, [3] that is also consistent with the results of this study as colon clear was associated with improvement of sexual sensations and properties among volunteers of the study.

As concerns a link between vinegar and testosterone, vinegar up-regulates glucose/insulin responses and it was found that a glucose drink is followed by a decreased level of testosterone for two hours at least. Therefore; though this matter is in need of justification through further studies, vinegar via regulating glucose spikes after foods with glycemic load would help to maintain testosterone. [12,16] Anyhow, the main concern of this study as regards the relation of vinegar to sexual functions is its effect on the gut bacteria of intestinal fermentation. Colon care which consists of vinegar-mixed salad among principal meals could get rid of the bacterial strains with abnormal behavior before reaching the colon to cause accumulation of ammonia and lead to pelvic congestion with its undesired sequels on sexual properties. [3,4,13] The complex nutritional requirements of most gut bacteria are achieved via its unique energy metabolism which exhibits characteristic dislocation sites. These sites can be considered as targets that should attract any attempts to control any undesirable effects of these bacteria. [17,18] As acetate is demonstrated as an end product among the metabolic pathway of these bacteria; [19,20] therefore, addition of acetic acid to the surrounding atmosphere

could compromise the energy metabolism or interfere with the respiratory chain metabolism of these bacteria. This suggestion is supported by the fact that the major routes of generation of energy for most gut bacteria are via pyruvate and the activity of the pyruvate dehydrogenase complex is controlled by the rules of product inhibition and feedback regulation. [21,22] For the same reason, addition of pyruvate to different solid culture media was found to inhibit bacterial growth, and this inhibition was attributed to accumulation of acetate and formate; [23] As the matter includes interference with the energy metabolism and the respiratory chain metabolism of bacteria; an immediate paralysis of these bacteria could be considered leading to their immediate eradication.

Erectile functions together with many pleasure sensations are neurovascular phenomena that result from local arousal by induced-release of neuronal and endothelial-derived NO liberation. [3] NO is a highly diffusible short-lived free radical gas, permeating biomembranes with a wide range of physiological functions. [24] NO has important beneficial implications on cardiovascular, immune and gastrointestinal functions. [11] The challenge in the matter of NO is not its administration such as in Viagra with its extreme widespread side effects, but its specific approach to the targeted sites. [3] Ammonium ion was demonstrated to increase the tone of rat portal vein and it was suggested that ammonium compounds increase vascular tone by causing influx of extracellular calcium through the voltage-dependent calcium channel and intracellular alkalization. [25] Accordingly, the ammonia of gut bacterial fermentation could lead to an increased micro-vascular tone in the pelvic area constituting a shear stress; stimulating in turn endothelial-induced NO liberation in response to the effect of this shear stress. [26] This could account to a physiological benefit of gut bacteria in favor of sexual sensations and functions. On the

contrary, accumulation of profuse toxic amounts of ammonia in the colon could lead to pelvic congestion with consequent decline of pleasure sensations and sexual properties. This is consistent with the suggestion that NO generated by gut bacteria in the immediate vicinity of the intestinal mucosa may exert either beneficial effects or at higher levels interfere with mucosal functions. [3,4,11,13]

Dietary nitrate reduction to nitrite, NO and ammonia occurs by gut bacteria under physiological conditions. Bacterial production of lactic acid causes medium acidification that in turn generates NO by non-enzymatic nitrite reduction. In contrast, nitrite was converted to NO by E.coli cultures even at neutral pH. It was suggested that nitrate is first converted to nitrite and subsequently to ammonia; accordingly the bacterial nitrate reduction to ammonia, as well as the related NO formation in the gut, could be an important aspect of the overall mammalian nitrate/nitrite/NO metabolism and is yet considered another way in which the bacteria can be linked to diet, fitness and health. [11]

The human microbiota comprises more than a thousand distinct bacterial species and plays a major role in human health by promoting nutrient supply, preventing pathogen colonization, shaping and maintaining normal mucosal immunity. Commensal gut bacteria have recently been appreciated as having a true symbiotic relationship with the host; within this large pool of bacteria, probiotic supplements containing lactic acid-producing bacteria (LAPB) like *Lactobacilli* have been emphasized to have a variety of beneficial effects on human health. LAPB are facultative anaerobic organisms that grow in abundance in the digestive tract of vertebrate animals. LAPB also represent some of the most commonly used probiotic bacteria and are extensively used for the production of fermented foods such as yogurts, cheeses, acid butter milk and many other products. All LAPB generate large amounts of lactic acid causing sufficient

acidification of the medium driving nitrite to NO. Although *E.coli* is capable of enzymatic NO production under anaerobic conditions from nitrate, *E. coli* generates insignificant NO levels during 24 hours incubation in culture media. LAPB produces considerable amounts of NO in response to acidification of the medium due to accumulation of lactic acid. Interestingly, the gastric acidic atmosphere is a well-established medium for this biologic phenomenon. [11,27-29]

As much as the traditional guidelines suggests that the colon is a source of illness and loss of the integral colonic function constitutes a critical risk, colonic health is a fundamental element of general wellbeing, fitness and sexual health. The antibiotic violence and abuse of antibiotics could constitute an environmental error towards gut bacteria leading to many health disadvantages. [4,13]

Improvement of sexual properties among the older age group as well as the younger age group in this study could indicate that changes of these sexual properties during latest years is not mainly related to decline of the peak of sex hormones in older ages but there should be a missed underlying environmental error that could account for these changes during latest years.

CONCLUSION

Colon care and colon clear employing natural measures could be considered valuable measures that can help to protect and maintain general and sexual health. Dietary vinegar and probiotic supplements are friendly to health and should be integral elements of one's style of life. The decline in sexual functions and pleasure sensations during latest years might be rather mostly untrue.

Conflict Of Interest: There is no conflict of interest existing.

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