

THE ATTRACTIVENESS OF MAN THROUGH THE AGES

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The increasing desire to preserve youthfulness up to a high age has always been a dream of mankind. Especially in our century, life expectancy has risen markedly in the industrialized world, so that this striving for youth is all the more understandable. Ageing always has been and is still regarded as an inevitable fate, a normal process that becomes manifest in all the organs of the body sooner or later. Certain changes that we associate with ageing take place in the tissue and the organs. These ageing processes occur at different times and in varying degrees of severity, depending on genetic, racial and even gender-specific factors. Men usually age slightly later and more slowly than women. In women, the production of sexual hormones ceases completely, whereas in men it is reduced gradually and they continue to be produced up to a high age [1, 2]. In contrast to the female menopause, the so-called "climacterium virile" does not start at any specific point in time. The change or drop in hormone level (testosterone and other androgens) is slow and continuous. Starting around the age of 40, the mean testosterone levels decrease by about 1 % per year [3, 4]. Equally, fertility is preserved right up to old age [5].

The general assumption that hormones act only in the sexual organs is incorrect. Hormone receptors can be found everywhere in the body, in bone tissue, muscle, brain, cardiovascular system and naturally also in the sexual

organs. An additional factor of uncertainty is the fact that the effectiveness of measurable testosterone on various end organs such as brain, muscles, bones, prostate and cavernous bodies, which also undergo the ageing process, is still unknown, and there may be an additional loss of effect here. In addition to this testicular function that is relevant for the hormone balance, i.e. testosterone production, the second testicular function, namely the production of sperm, remains active right up to old age. Thus, the male sexual hormones, the so-called androgens, have an uninterrupted influence on a man's life from the embryonal period through to old age (senium).

In addition to the decrease in available testosterone as of the age of 40, the decrease in other hormones is also important for bone density and for lipids [6]. Men can also suffer from estrogen deficiency. Another hormone, DHEA (dehydroepiandrosterone) decreases to a third of its level in men between the ages of 30 and 50. Studies have shown that patients with a high DHEA level have a markedly lower risk of cardiovascular disease. DHEA is metabolized specifically in men and women, namely into androgens in women and into estrogens in men. When administered, DHEA acts like an estrogen with a positive effect on bone and cardiovascular system. Therefore, an investigation of the complete hormone status is very important.

Nowadays, estrogen deficiency in women is balanced by modern hormone replacement therapy, thus maintaining their quality of life, but the opinions regarding hormone replacement therapy for men are still very controversial, and in addition there is not enough recent data available. Individual studies have however shown that it is possible to improve a man's psychological and physical well-being quite considerably with hormone replacement. Recently published study results were able to show that testosterone replacement improves bone density and libido. A possible hormone deficiency should never be treated without an accurate hormonal diagnosis. In some cases, hormone replacement for men can be very beneficial, but – like in women – the hormone replacement therapy should only be administered under experienced medical supervision in order to be able to identify adverse effects and to provide a remedy for these as quickly as possible [7].

Recent studies concerning the ageing men were presented at the 2nd World Congress of The Ageing Male in Geneva in early February 2000. It was shown that 20% of men over the age of 60 have a testosterone deficiency. Therefore it is quite right that the man is now more in the center of study interest, and further research is definitely necessary in order to develop suitable hormone replacement therapies for men.

The female climacterium has meanwhile become a topic that is no longer a social taboo, but the ageing symptoms of the man are still a taboo topic – perhaps not entirely against men's wishes. The fact that of the many, often much more understandable terms used so far, the acronyms "PADAM" or "PEDAM", which are very difficult for laypeople to understand, have ulti-

mately prevailed on the international level shows just how difficult it is to find a concept for the age-related changes in men. The terms "climacterium virile" or "andropause" for the man's change in life, for example, are not really accepted; instead, we now speak of the "partial androgen deficit in the aging man", PADAM, or even more generally of the "partial endocrine deficiency of the ageing man", PEDAM. On the one hand, the term andropause is incorrect, since testosterone production does not cease entirely in the male, and on the other hand psychological reasons certainly play quite a considerable role in the choice of expression.

So far, not very much is known about the effects of a hormone deficiency in the ageing man. It is certain, however, that the hormone level of the sexual hormones also decreases with increasing age in the male body. This decrease in blood hormone levels can cause "climacteric" complaints. Usually, these complaints are uncharacteristic symptoms such as vegetative complaints, hot flushes, increased nocturnal perspiration and ventricular tachycardia. Dizziness, sleep disorders, concentration problems and a clear drop in performance may also occur. The visceral fat mass increases, resulting in the typical protruding belly. Moreover, the libido, the sexual activity and strength of erection decline, moods shift with a tendency towards depression. Transient muscle and joint pain may also occur [7–9]. According to experts, the physical and psychological changes also lead to a reorientation, which can vary quite considerably. The more or less aggressive display behaviour of younger men changes into a reflection of other fundamental values, such as family and friends, or even a new partnership.

Another, entirely different aspect is that of late fathers, usually with a new partner and increasingly over the age of 60, where the man actively becomes a father again with the advantage of more awareness, enlightenment and time for this new role. This active awareness of the father role must also be regarded as a kind of fountain of youth, since the interaction with children and youngsters promotes flexibility and prevents letting go of oneself, on the one hand in order to document one's youthfulness to society and on the other hand to be able to "keep up with" one's children. In addition to health policy reasons, changes in the social structures and in society therefore also are important in the slow but constant change that the male role is experiencing throughout each phase of life [11, 12].

The hormonal change is not as easy to diagnose as in women, however. There is no typical turning point such as the cessation of ovarian functions, as already mentioned. Moreover, a low testosterone level need not necessarily be associated with specific symptoms. Individual hormone measurements are usually insufficient, since there are enormous inter- and intra-individual fluctuations in testosterone levels. Furthermore, there is a marked circadian rhythm with peak levels in the morning, and an annual rhythm with peaks in June and minimum levels in August. There is still a very controversial debate on the sensibility of testosterone, its advantages and disadvantages, and they will remain the subject of numerous expert discussions for some years [12, 13].

In addition to the typical complaints, such as nervousness, insomnia, concentration problems or fatigue, there are also numerous organic signs. In old age, men lose 20 to 30% of their bone

mass, and the incidence of femoral neck fractures is about half that of women. Hypogonadism, i.e. a markedly reduced testosterone level, is present in 20% of older men with osteoporosis. Vascular problems are to the fore in many age-related functional disorders. The affluence-induced diseases common in our society, combined with smoking, cause vascular changes in almost all the organs. Whilst fairly low testosterone levels are sufficient to preserve the basic male sexual functions such as growth of beard and voice formation, fairly high androgen serum levels are necessary for a normal libido and male sexuality. The connection between libido, e.g. the frequency of sexual desires, and testosterone level has been known for many decades. A normal male sexual activity is not possible without androgens. Erectile dysfunctions are also possible within the scope of an androgen deficiency. The quality of the erection changes in the older man, however, and this in turn does not represent a pathological finding in relation to the age.

The gap between male and female life expectation is constantly increasing. One of the possible factors for this could be the fact that men under the age of 65 visit the doctor about one third less frequently than women. Our knowledge of male endocrinology and hormone replacement therapy is also far behind what we already know about this topic in women. However, we may assume that male hormone replacement therapy will be able to benefit from the intensive experience with hormone replacement therapy in women. The first world congress on the subject "The Ageing Man", which was organized by the WHO in Geneva in February 1998, was a major step in this direction. The main topic of this con-

gress was the discussion of hormone replacement therapy in the ageing man.

Nonetheless, the differences in the ageing process both in women and in men have shifted considerably in recent years. The way we treat our body and our active lifestyles are becoming more and more important, so that it is hardly surprising that men aged around 50 nowadays feel about 15 years younger than their actual age. The social pressure to stay young, slim and dynamic is becoming stronger and is also affecting men. Modern advertising is making just as much use of the young, almost naked man with an ideal figure – “washboard stomach”, muscular body, together with a gentle expression – as the counterpart to the young women that have been dominating advertising for many decades. As a result, his appearance is becoming more and more important for a man’s self-definition, something that has always applied to women. It also means that the man has to learn to deal with this new situation. Thus, certain problems are pre-programmed, especially at this age. The old quotation from Friedrich Torberg’s “Aunt Jolesch”: “... *Everything about a man that is more beautiful than an ape is luxury ...*” is no longer valid as an excuse for letting go of oneself where appearance is concerned.

The lifestyle and social changes do not remain without their traces. For example, a woman in the middle phase of life more and more often prefers a younger man as her second partner, and she takes the consequences actively if the partnership threatens to break up. Also, the professional pressure on men over the age of 50 is increasing, and in this phase of life men are often pushed out of the professional world for cost reasons, and they have virtually no chance of reintegration into the work process. This is an en-

tirely new life situation for the man, in which he has no or hardly any possibility to intervene actively and thus loses his independence, his self-esteem. As a result, the “midlife crisis” may well occur during this phase of life, in which his physical and psychological performance is weakened and he is under enormous professional and/or private pressure at the same time. The individual crisis management varies quite considerably and cannot be generalized due to the very individual personal situation.

All this has led man to start rethinking, to become more body-conscious, to value appearance, health and diet more, ultimately to be able to withstand the quite considerable social pressure better. Apart from the sciences and psychology, many other “health-related” disciplines such as cosmetics, diet counselling, fitness and sports are also looking into these changes. “Lifestyle”, “anti-ageing”, “forever young” are just some of the modern phrases that have become popular in advertising for an industry that is not to be underestimated, both in the field of health and in the field of beauty [14, 15].

Even for men, aesthetic and plastic surgery has stopped being a taboo in recent years. For men, an attractive appearance has become an important career factor, not only at work but also in their private lives. In Austria, like in the United States, about 15% of all aesthetic-plastic surgery patients are men. Their main interest is to look fresher, more dynamic, and younger. The most common corrections for men are eyelid surgery, upper and lower eyelid corrections, nose corrections and facelifts. More and more men are also having liposuction in the region of the belly and the breast (in cases of gynecomastia). Hair transplants for

baldness, collagen injections for wrinkles, and the removal of pigmentation marks are also popular cosmetic surgical therapies to maintain a youthful appearance.

The lid corrections, i.e. correction of so-called drooping eyelids or hanging upper lids and tear sacs are the most common operations for men. These operations are usually performed with sedation and local anaesthesia. The incision in the upper lid is usually hidden in the fold of the eyelid afterwards. In the operation, the fat pad is partly removed and it does not reform. In addition, the orbicular muscle is lifted. After a short stay in hospital (usually one night), activities have to be reduced for about one week, since swelling is possible. The removed skin does not grow back again, the eye becomes clear and fresh and the scar is no longer visible after three to four weeks. In cases of very strongly drooping eyelids, the eyesight and range of vision may be impaired, thus providing a medical indication for the operation, in which case the health insurance will cover the costs. The protruding fatty tissue of the lower edge of the eyelid is also removed with a – later invisible – incision under sedation and local anaesthesia, and in addition the muscles and skin are lifted. This lower eyelid correction is difficult and requires great precision and experience on the part of the surgeon. The incision must be extremely close to the eyelash, if the scar is to be invisible later, and if the lower eyelids are very flabby there is a risk that the edge of the eyelids will arch outwards.

The second most common surgery for men is the nose correction. In this operation, the nasal bone is modeled from inside without any scarring visible on the outside. The skin adapts to the new contour, thus improving the shape of the nose. Because the skin is some-

times quite thick, men thereby have the problem that it cannot adapt to the new contour 100%. The men's main fear however is that the nose correction might be overdone and that the new nose will not suit a male face. Thereby, the surgeon's skill is very important, since the result of a rhinoplasty can never be a nose from a catalogue, it must always match the patient's character. After the operation, the patient must wear a plastic nose dressing for about one week, and a nose strapping for another week. After this, the swelling of the nose has usually disappeared and the patient can return to work without the operation being conspicuous. He must refrain from sports activities for about four weeks.

A facelift for men is a particular challenge for the plastic surgeon, since the scars should not be visible and this is usually quite difficult due to the man's short haircut or lack of hair. The incision for the facelift must follow the edge of the ear very exactly in order for the scar to be as invisible as possible. The operation is performed with sedation and local anaesthesia. Most commonly, double chins and cheeks are corrected. The fat under the chin is removed through a small incision, and it does not reform at this location. Deep nose-lip wrinkles are smoothed out through a small incision around the ear. A drooping cheek is lifted behind the ear. The result is a positive, fresh general impression of the face. The entire operation takes about two hours, after which the patient remains in hospital for three days. When he leaves the hospital, only two thin plasters in front of and behind the ear are necessary. The stitches are removed after about ten days. In the meanwhile, a special bandage should be worn for hours at a time to fix the tissue. After about three weeks, the only visible signs of the

operation are a few delicate little scars and possibly slight bruising.

It is important to avoid excessive corrections in male plastic surgery, and to achieve a natural, fresh, positive appearance using state of the art technology and techniques.

No-one is granted perpetual youth, but in our day and age, with our modern knowledge and modern medicine in conjunction with the patient's own efforts, such as physical and mental training, the right diet at the right time, etc., it is possible to slow down and delay the ageing process both physically and mentally. In addition, modern hormone replacement therapy for men can provide support for body and mind. All this can help to maintain both agility and a youthful appearance for as long as possible, and to allow a good quality of life right up to an old age. However, even if we understand the wish to maintain youth for as long as possible, as sensible people we should never forget that ageing in dignity is an important part of our human culture.

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