Dubai: The Dubai Health Authority announced earlier its full support to the fifteenth edition of the UAE International Dental Conference and Arab Dental Exhibition (AEEDC Dubai) which will be held from 1 to 3 February at the Dubai International Convention and Exhibition centre, under the patronage of H.H. Sheikh Hamdan Bin Rashid Al Maktoum, Deputy Ruler of Dubai, Minister of Finance and President of the Dubai Health Authority.

Qadhi Saeed Al Murooshid, Director General of Dubai Health Authority, said “we are keen to support all medical conferences and exhibitions held in the UAE for their excellent revenues on all sectors in the country, including; economy, trade, tourism and other sectors.

Such events motivate the economy and development to move forward, and develop the skills and capabilities of the public and private sectors.” He continued; “Qualified Medical events such as AEEDC provide excellent opportunities for doctors from the region and introduce them to the latest scientific developments in the fields of dentistry, in addition, they provide them with the opportunity to engage with international dentists.

This initiative translates the vision of His Highness Sheikh Mohammed Bin Rashid Al Maktoum, Vice President and Prime Minister of the UAE and Ruler of Dubai, and H.H. Sheikh Hamdan Bin Rashid Al Maktoum, Deputy Ruler of Dubai, Minister of Finance and President of Dubai Health Authority.” HE added that AEEDC Conference and Exhibition is getting bigger and better every year, as those in developed countries. He declared that AEEDC Conference and Exhibition is getting bigger and better every year, as is also the scale of AEEDC which is attended by healthcare professionals and exhibitors from all over the world.

He also pointed out that the public and private dental services in Dubai are very efficient and are at the same level with those in developed countries. He declared that AEEDC Conference and Exhibition is getting bigger and better every year, as is also the scale of AEEDC which is attended by healthcare professionals and exhibitors from all over the world.

Scientists have discovered why people with diabetes are more likely to experience severe strokes leading to greater damage.

When blood sugar levels are high - which happens in diabetes - a blood protein called plasma kallikrein inhibits the normal blood clotting process during a stroke, leading to more bleeding on the brain, the scientists suggested. Strokes are caused by either a blood clot in a vessel stopping the flow of blood to the brain (ischaemic stroke) or by a burst blood vessel (haemorrhagic stroke). About seven out of 10 strokes are caused by blood clots.

Past research has associated diabetes and raised blood sugar levels with increased bleeding on the brain during haemorrhagic stroke, but the reason for this is unclear.

Scientists from the Joslin Diabetes Centre in Boston reached their conclusion after injecting blood into the brains of rats with and without diabetes. The diabetic rats bled over a much greater area of the brain. But when the diabetic rats were also injected with a molecule which inhibits the activity of plasma kallikrein, the amount of damage to the brain was similar to that in non-diabetic rats.

When pure plasma kallikrein was injected into the rats’ brains, it rapidly increased major bleeding in the animals with diabetes but had little effect on those without the condition, the researchers wrote in the journal Nature Medicine.

The scientists say their work suggests that blood sugar levels at the time of having a stroke is the most important factor for the increased bleeding seen in diabetes patients.
A-dec Introduces Its
Newest Family Member:
A-dec 200™

Unhealthy lifestyles and heavy
drinking are contributing to
high rates of breast cancer in
Britain, according to a new re-
port.

Experts from the World
Health Organisation (WHO)
blame alcohol consumption and
obesity levels for the number of
cancer cases.

Overall, the UK is 22nd of the
top 25 to report the rate of breast
cancer, according to the report,
which sees the country placed
53rd for all cancers among males
to 12th for females.

But the analysis also shows
rates of cancer overall are higher
in men than women. On breast
cancer, more men per 100,000
develop the disease in the UK
(280.5) than in France (254.9).

New Point-of-entry A-dec 200
Offers No-Compromise
Performance and Real A-dec Value

A-dec, a global leader in den-
tal equipment, introduces A-dec
200™, the newest in A-dec’s line-
up of patient chairs and de-
ivery systems, with input from
dental professionals around
the world to accommodate the wide
range of practice styles found in
global markets.

The space-saving chair-
mounted delivery system in-
cludes a telescoping assistant’s
arm and an oversized tray to hold
everything the dental team
needs. The new multi-axis light
provides easy and precise posi-
tioning of illumination, and the
cuspidor rotates conveniently to
the patient when needed.

The chair, light and cuspi-
dor functions are easily controlled
from A-dec’s modern touchpad
and small and large practices will
enjoy the open platform that
leaves room to add or change an-
cillary devices for peak perform-
ance now, and in the future.

To learn more about A-dec
200, contact your local author-
ed A-dec dealer.

New device lets patients
rest from dental drill

Tunnels of sound knock out
noise from engines inside road
vehicles that block out
noise from dental drills.

The new device, containing a
microphone and a computer
chip, was developed in regard to
the shrill sound generated by
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Noise cancelling or Active
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New treatment helps beat depression

A grandmother who had a long battle with depression has become the first person in the world to benefit from life-changing neurosurgical treatment.

Sheila Cook, from Torquay in Devon, suffered from depression for more than a decade and attempted to take her life on more than one occasion. The 62-year-old is now beginning to enjoy life again after pioneering treatment, which accurately targets brains networks involved in depression, was offered to her in Bristol.

Mrs Cook - whose illness had stopped responding to conventional treatments - was offered deep brain stimulation (DBS) in the first trial in the world that stimulates two different brain networks that are involved in depression. Although DBS provided some temporary response, she relapsed and went on to be the first to have further advanced stereotactic neurosurgery, which was carried out in early 2010.

Mrs Cook said: “The effects were remarkable. Within a few weeks my life changed. I read books, did the housework, went for walks and, perhaps most importantly, got to know my family again.” Leading the research is Dr Andrea Malizia, consultant senior lecturer in the School of Social and Community Medicine at the University of Bristol and Mr Nikunj Patel, senior clinical lecturer in the Department of Neurosurgery at North Bristol NHS Trust.

Dental implants see fastest growth in Emerging Markets

NEW YORK, USA/LEIPZIG, Germany: Premium manufacturers are driving the market for dental implants and bone-craft substitutes in countries like China and India, according to iData Research. In a market report, the Canada-based consulting company has forecasted the market volume of both countries for dental implants and bone-craft substitutes in countries like China and India, according to iData Research. In a market report, the Canada-based consulting company has forecasted the market volume of both countries for dental implants to exceed US$400 million by the year 2017. Strong double digit growth rates were also predicted for Brazil, another potent global Emerging Market.
Woman regains voice after rare larynx transplant

Complex and rare transplant operation restores women’s voice

A woman who has been unable to speak for more than a decade has regained her voice after undergoing a rare voicebox transplant.

Brenda Jensen, lost the ability to speak following surgery 11 years ago. Her voice box was damaged after she repeatedly ripped out a breathing tube whilst sedated.

Since then she has been unable to smell or taste food and can only breathe with the help of a tracheostomy tube. An electronic hand held device that produces an artificial robot-like voice was her only way of speaking to others.

An international team of surgeons - which included Professor Martin Birchall from University College London - performed the complex surgery at the University of California Davis Medical Centre, US. More than two dozen surgeons, doctors, nurses and technicians were involved overall.

The 52 year-old-woman spoke her first words just 13 days after the operation. She is now able to speak easily.

Ms Jensen said: “This operation has restored my life. I feel so blessed to have been given this opportunity. It is a miracle. I’m talking, talking, talking, which just amazes my family and friends.”

The surgeons removed and replaced Ms. Jensen’s larynx (voicebox), thyroid gland and trachea (windpipe) with that from a donor who died in an accident. Surgeons had to work simultaneously on each side of the patient to reconnect the organ and various nerves, veins and arteries.

The new voice sounded hoarse after the operation, but has improved significantly since the transplant. Although the donor organ came from an accident victim, Ms. Jensen’s voice is her own and not that of the donor, the surgeons said.

Ms Jensen is now able to smell and taste food and is in the process of relearning to swallow. She hopes to soon be able to eat and drink normally again.

“We are absolutely delighted with the results of this extraordinary case,” said Professor Gregory Farwell, at UC Davis Medical Centre and lead surgeon for the transplant. “The larynx is an incredibly complex organ, with intricate nerves and muscles functioning to provide voice and allow breathing.

“Our success required that we assemble an exceptional, multi-disciplinary team, use the most recent advances in surgical and rehabilitation techniques, and find a patient who would relish the daunting challenges of undergoing the transplant and the work necessary to use her new voicebox.”

Dr John Williams, Head of Clinical Activities at the Wellcome Trust, which has supported Professor Birchall’s research in the past said: “This is a truly extraordinary achievement and a genuine breakthrough.

“Professor Birchall and colleagues have clearly transformed the life of their patient and their work offers much hope both for patients in need of similar procedures and indeed for research into transplantation and regenerative medicine in general.”

Martin Birchall from University College London - performed the complex surgery at the University of California Davis Medical Centre, US. More than two dozen surgeons, doctors, nurses and technicians were involved overall.

The 52 year-old-woman spoke her first words just 15 days after the operation. She is now able to speak easily.

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Japanese scientists develop replacement for dental metal

Yvonne Bachmann

HONG KONG/LEIPZIG, Germany: Scientists from the Kyoto University in Japan reported to have developed a new alloy similar to palladium, a rare metal used in dental restorations. The element was produced by mixing molecules of silver and rhodium, two elements chemically close to palladium, and could be a first step in producing synthetic alternatives for other rare earths, the researchers told the Yomiuri Shimbun newspaper in Tokyo.

Palladium only naturally occurs in some parts of Russia, South Africa, Canada and the US. Besides dentistry, it is used to produce autocatalysts, jewellery and essential components for consumer electronic products, amongst other things. A 2010 report by US chemical company Johnson Matthey estimates that 5 to 6 per cent of the annual demand comes from dentistry for crowns or bridgework. With an annual demand of 8.5 tons, Japan continues to utilise the largest amount of dental palladium despite other treatment options, such as all-ceramic crowns, according to the same report.

The researchers have begun joint research projects with the Japanese industry, though they said the new alloy will be difficult to produce commercially. Metal experts, however, are sceptical towards the announcement. “It does look like they have managed to create ‘nanoparticles’—an often abused phrase—of rhodium and silver, which would normally be used in traditional melting techniques,” Johnson Matthey General Manager Peter Duncan told the South African Journal Mining Weekly. “It is very common for Japanese academics to patent anything vaguely new, regardless of its potential in the commercial world.”

Japanese experts said that synthetic replacements for rare metals could make Japan more independent from countries like China, which currently produces over 90 per cent of rare metals in the world.

Montreal to welcome dentists from around the world

MONTREAL: Following a record-breaking attendance year in 2010, over 12,000 delegates are expected to attend the 40th annual Journées dentaires internationales du Québec (JDIQ) to be held in Montreal, Canada, from May 27 to 31, 2011. Canada’s largest annual meeting, JDIQ has grown exponentially in recent years.
Human symmetry

The Roman architect Vitruvius’ (Marcus Vitruvius Pollio) description of the perfect human form in geometrical terms was a source of inspiration for Leonardo da Vinci, who successfully illustrated the proportions outlined in Vitruvius’ work ‘De Architectura.’ The result, the Vitruvian man, is one of the most recognised drawings in the world and is accepted as the standard of human physical beauty. Vitruvius theorised that the essential symmetry of the human body, with arms and legs extended, should fit into the perfect geometric forms; the circle and the square. However, Leonardo Da Vinci recognised that the circle and the square were only tangent at one place, the base. He observed this as in Fig 8. The stabilising platform for the human outlined form begins at that tangent, the intersection is graphically analogous to the structural configuration of platform switching.

In geometry, an oval is a curve resembling an egg or an ellipse. Architects and engineers have used smooth oval curves to support the weight of structures over an open space literally since the second millennium BC. These arches, vaults and domes can be seen in buildings and bridges all over the world, the most perva-sive example being the keystone arches used by the Romans for aqueducts and mills.

An arch directs pressure along its form so that it compresses the building material from which it is constructed. Even a concrete block is readily broken if you hit it on the side with a sledge. But under compression forces from above, the block is incredibly strong and unyielding. Many will remember the weight bearing tripod experiments from grade school where an egg acts as one of three supporting legs of a square section of wood bearing books as the load. The structure could support over sixty books, almost twenty pounds, before breaking the supporting egg. One need only look at the root trunk and coronal tooth structure of a multi-rooted tooth and it becomes apparent that strength of the tooth form is dependent upon an arch form for its integrity (Figs 8 & 9).

Optimal engineering

Is it possible for this natural feat of engineering to be biomimetically replicated to the design parameters of osses-integrated implants? There are a number of paradigms that continue to fuel debate in the dental clinical and scientific communities pertaining to the optimal engineering predicates for implant design. These include smooth vs. rough surfaces, submerged vs. non-submerged installation techniques, tapered implant-vso. solely implant-supported reconstructions, Morse taper abutment fixation vs. butt joint interface and titanium abutments vs. esthetic abutments in clinical situations where esthetics is of primary concern.

The cone-screw abutment has been shown to diminish micro-movement by reducing the burden of component loosening and fracture. This enables the identification of the effects of the parameters such as friction, geometric properties of the screw, the taper angle, and the elastic properties of the materials on the mechanics of the system.

In particular, a relation between the tightening torque and the screw pretension is identified. It was shown that the loosening torque is smaller than the tightening torque for typical values of the parameters.

Most of the tightening load is carried by the tapered section of the abutment, and in certain combinations of the parameters the pretension in the screw may become zero. This tapered abutment connection provides high resistance to bending and rotational torque during clinical function, which significantly reduces the possibilities of screw fracture or loosening.

Biomechanics

The seed of a tree has the nature of a branch or twig or bud. It is a part of the tree, but if separated and set in the earth to be better nourished, the embryo or young tree contained in it takes root and grows into a new tree,” Isaac Newton.

Pressure on the cervical cortical plate, micro-movement of the fixture-abutment interface (FAI) as well as microleakage and colonization at and within the FAI are some of the pathologic vectors associated with osseous remodeling, both crestal and peripheral to dental implants.

Occlusal considerations engineered into fixture design should enable optimum load distribution for permanent load stability during functional loading, reduce functional stress transfer to the interfacial tissues and enhance the biologic reaction of interfacial tissues to occlusally generated stress transfer conditions.

Future modifications to implant biomechanics should focus on designs wherein the osseous trabecular framework retaining the fixture will adapt to the amount and the direction of applied mechanical forces, cope with off-axis loading, compensate for occlusal plane to implant height ratios differences as well as adjusting to mandibular flexion and torsion.

In this new era of implant driven treatment planning, fixtures should be engineered to support single crowns with cantilevers instead of implant/implant or implant/teeth connections for a span of any degree. These engineering design iterations will minimise high-stress torque load at the implant abutment interface and obviate areas with degrees of bone insufficiency.

The goal should be to biomimetically replicate the natural state to the greatest degree (Figures 10a and 10b) in regard to load bearing capacity.

Measuring success

Stable crestal bone levels are the yardstick by which treatment success and health are measured in the orofacial ecosystem, whether it relates to natural tooth retention or restorative and/or replacement rehabilitation. It is therefore surprising that the treatment outcome standards for switched and subcrestally positioned design demonstrated better stress based performance and lower risk of bone overload than the other implant systems evaluated.

Essential features

Platform switching, together with a stable implant-abutment connection are increasingly accepted as essential design features required to reduce or eliminate early crestal bone loss. A bacteria-proof seal, a lack of micro-movement due to a long friction grip tapered channel and minimally invasive second-stage surgery without any major trauma for the periodontal tissues are also important factors in preventing cervical bone loss.

An increased uniform amount of coronal dentin significantly amplifies the fracture resistance of endodontically treated teeth, regardless of the post system used or the choice of material for the full coverage restoration11. A recent article by Coppede et al demonstrated that friction-locking mechanisms and the solid design of internal conical abutments provided greater resistance to deformation and fracture under oblique compressive loading when compared to internal hex abutments10. These two “seemingly” disparate observations define the inherent continuum between natural tooth engineering and the principles of engineering necessary to orthobiologically replicate the native state.

The use of a ferrule or collar and a bonded or intimately fit post-core to restore function and form to an endodontically treated tooth is analogous to the use of a long, tapered friction fit interface with a retaining screw (Morse taper), to secure an abutment to a fixture. In both cases, the role of contact pressure between mating surfaces to generate frictional resistance provides a locked connection. This has been shown to affect the long-term stability of crestal bone support for the overlying gingival tissues and maintains a healthy protective and esthetic periodontal attachment apparatus.

Meniscus

Marcus Vitruvius Pollio (Vitruvius) described the form of the human body, with arms and legs squared off and extended, as one of the most recognized drawings in the world and is accepted as the standard of human physical beauty. Vitruvius theorised that the essential symmetry of the human body, with arms and legs extended, should fit into the perfect geometric forms; the circle and the square. However, Leonardo Da Vinci noticed that the circle and the square were only tangent at one place, the base. He observed this as in Fig 8. The stabilizing platform for the human outline form begins at that tangent, the intersection is graphically analogous to the structural configuration of platform switching.

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A preconfigured platform switched design has a significant impact on the implant treatment in esthetic areas as not only is the tissue biotype preserved, but it has been shown to ossify-integration accept crestal bone remodeling and resorption of up to 1.5 – 2mm during the first year following fixture placement and prosthetic insertion 11.

The concept of "biological width" outlines the minimum soft tissue dimension that is physiologically necessary to protect and separate the osseous crest from a healthy gingival margin surrounding teeth and the peri-implant environment.

A bacteria proof seal, the lack of micro-movement associated with a friction grip interface and a minimally invasive second-stage surgery (where indicated) without any major trauma to the periodontal tissues, are also important factors in preventing cervical bone loss. The literature suggests that the stability of the implant-abutment interface may have an important early role to play in determining crestal bone levels 12. Tarnow’s seminal study on crestal bone height support for the interdental papilla clearly showed the influence of the bony crest on the presence or absence of papillae between implants and adjacent teeth 13. Twenty years later, logic dictates that anticipated early crestal bone loss and diminished, albeit continual loss, during successive years of function, should have been engineered out of the substitution algorithm for peri-implant tissues 14.

Platform switching: By default or by design

"There is no logical way to the discovery of elemental laws. There is only the way of intuition, which is helped by a feeling for the order lying behind the appearance," Albert Einstein.

Ericsson et al. 15 detected neuromuscular infiltrate in the connective tissue zone contacting the implant-abutment interface. The facility by which platform switching/shifting reduces bone loss around implants has been investigated by Lazzara et al. 16. The authors hypothesised, that if the abutment diameter matches that of the implant, the inflammatory cell infiltrate is formed in the connective tissue zone contacting the microgap created at the FAI. If an abutment of narrower diameter is connected to wider neck implant, the FAI is shifted away from the outer edge of the implant, thus diminishing inflammatory cell infiltrate away from bone. Hypothetically, less crestal bone loss is expected and an increased implant-abutment disparity allows more stable peri-implant soft tissue integration.

Baggi et al. conducted a finite element analysis experiment to define stress distribution and magnitude in the crestal area around three commercially available implants – ITI Straumann® (Institut Straumann AG, Basel CH), Nobel Biocare (Nobel Biocare AB, Göteborg SE) and Ankylos® (DENTSPLY-Friadent, Manheim, DE) 17. Numerical models of maxillary and mandibular molar bone segments were generated from computed tomography images and local stress vectors were introduced to allow for the assessment of bone overload risk. Different crestal bone geometries were also modeled.

Type II bone quality was approximated and complete osseous integration was assumed. It was concluded that the Ankylos® implant based on its platform switching theories that by using an abutment diameter of a lesser dimension than the periphery of the implant fixture, horizontal relocation of the implant-abutment connection will reduce remodeling and resorption of crestal bone after insertion and loading.

The concept implies that peri-implant hard tissue stability will engender soft tissue and papilla preservation. Maeda et al. report that stress levels in the cervical bone area peripheral to a fixture were reduced when a narrow diame- ter abutment was connected in comparison to a size commensurate with the fixture diameter 18.

The authors concluded that the biomechanical advantage of shifting stress concentrations away from the cervical area will diminish their impact on the bio-logic dimension of hard and soft tissue, promoting apically from the FAI (Fig 11a, 11b and 11c). The inherent disadvantage is that it shifts stress to the abutment screw with the potential for loosening or fracture.

The endodontic implant algorithm parallels the question, which came first, the chicken or the egg as an example of circular cause and consequence. It could be reformulated as follows: Which came first, A that can’t come without Y, or Y that can’t come without X? An equivalent situation arises in engineering and science known as circular reference, in which a parameter is required to calculate that parameter itself. This is the essence of foundational dentistry.

Nature wisely created a structure that could harmoniously interplate hard and soft tissue, act as the portal of nutrition and communication for the body and be the gateway to its rules, its logic and fundamentals.

The best evidence

This is not an easy task, as filing evidence from a wide range of sources, presenting clear, comprehensive analyses and incorporating patient experience is a Herculean task.

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The best evidence

This is not an easy task, as filing evidence from a wide range of sources, presenting clear, comprehensive analyses and incorporating patient experience is a Herculean task.

The authors concluded that the Ankylos® implant hard tissue stability will engender soft tissue and papilla preservation. Maeda et al. report that stress levels in the cervical bone area peripheral to a fixture were reduced when a narrow diameter abutment was connected in comparison to a size commensurate with the fixture diameter. The authors concluded that the biomechanical advantage of shifting stress concentrations away from the cervical area will diminish their impact on the bio-logic dimension of hard and soft tissue, promoting apically from the FAI (Fig 11a, 11b and 11c). The inherent disadvantage is that it shifts stress to the abutment screw with the potential for loosening or fracture.

The endodontic implant algorithm parallels the question, which came first, the chicken or the egg as an example of circular cause and consequence. It could be reformulated as follows: Which came first, A that can’t come without Y, or Y that can’t come without X? An equivalent situation arises in engineering and science known as circular reference, in which a parameter is required to calculate that parameter itself. This is the essence of foundational dentistry.
Most dentists are not primarily business people, so it’s not surprising that since the General Dental Council (GDC) altered the regulations to allow dental practices to operate as limited companies from 2006, there has been much speculation and misinformation circulating within the profession about whether to take this step. **Limited Liability**

The use of the word ‘limited’ in the title ‘limited company’ refers to limited liability. While even in these parlous times, few dental practices are in danger of closing, the shareholders in a limited company have the security of knowing that their exposure to liabilities to creditors will never exceed their original share capital, usually between £100 and £1,000.

Another advantage of trading as a limited company is the higher level of credibility in many commercial negotiations or inter-business relations accorded to a company compared with a sole trader.

**Selling to a third party**

It is often easier to transfer the ownership of a practice trading as a limited company. This is because the company remains in existence unless it is dissolved or liquidated.

The existing business arrangements, bank accounts and supply contracts, for example, all stay the same under the new ownership, while the new owner of a sole-trader practice would need to re-establish these relationships under his/her own name. This is especially important with PCT contracts, which should be unaffected, provided the PCT has been properly approached at the time of incorporation and the PCT contract has been transferred into the limited company without restriction. Experience shows that incorporated practices with PCT contracts are realising higher selling values than unincorporated practices, partly for this reason.

The process of incorporation and the resulting altered tax regime enables converting sole traders to use tax savings arising from incorporation to substantially increase their pension contributions without affecting their current quality of life, subject to the new rules on pension contributions for high earners.

**Tax benefits**

Other taxation benefits, related to the differences between how individuals and companies pay tax and National Insurance, depend on the individual’s income, which is effectively the practice’s profit in any given year.
For example, a sole trader making a profit of around £100,000 pa, and drawing out of the practice all of the profit, would expect to be about £4,000 pa better off after incorporation, just based on the rate differences alone (09/10 tax tables), before any other planning is done to significantly increase the amount of the total tax savings.

**Cash flow benefits**

Converting to a limited company also has cash flow benefits. Sole traders normally pay tax on their profits (income) in two instalments, with about half becoming due two months before the end of the tax year and the other about half payable payable four months after the end of the tax year. Limited companies of this size do not make payments on account, and their Corporation Tax, as opposed to Income Tax, is not payable until nine months after the end of the tax year. When the practice is transferred to the newly formed company, it can often borrow to pay for the goodwill, which can amount to 100 per cent of the annual turnover of the practice.

The interest on this loan qualifies for tax relief, and the capital sum borrowed by the limited company can be used by the dentist to reduce non-tax deductible payments, for example on his/her home mortgage. In some cases, the home mortgage can be paid off in its entirety, depending on the goodwill value.

Even if the company does not need to borrow to complete the purchase of the practice, it is possible for the dentist as both shareholder and company director (employee) to draw from the company a combination of salary, dividends, and loan repayment, to reduce his/her personal tax liability to zero, for a number of years after incorporation. Corporation Tax on the practice’s (now the company) profits is of course still paid, currently at a rate of 21 per cent on profits up to £300,000.

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About the author

Michael Lansdell was brought up in South Africa, receiving his honours degree there in 1991. He completed his training with international accounting firm Deloitte in 1994, and went on to become a founding partner at Lansdell & Rose Chartered Accountants (SA) a year later. Based in Kensington, London, Lansdell & Rose deal only on a long-term retained basis, exclusively with owner-managed clients, generally dentists and doctors, and specialising in the incorporation of dental practices. As a client-focused team, they look for sustainable long-term solutions for their clients that maximise profits, minimise tax and build wealth. For more information visit [www.lansdellrose.co.uk](http://www.lansdellrose.co.uk) or call 020 7376 9333.
Male Menopause Fact or Fiction?

Are you over 40 and feeling fat, tired, irritable, depressed and undervalued? Is it a midlife crisis or could you be suffering from the male menopause?

Sometimes known as the male climacteric (Greek: klimakterion, meaning ‘a turning point’), there is a lot of discussion as to whether or not the male menopause exists in any real medical sense. We know for sure that women go through very definite physical changes in their mid life. Ovulation stops, hormone levels drop quickly. Within a few short years they become unable to have children any more. Of course these features don’t apply to men.

In contrast to women, male hormone levels remain pretty constant and most men can father children into their seventies. There is a gradual decline in hormone levels and, by the age of 80 years, serum testosterone concentrations fall to about 75% and free testosterone to about 50% of what they were at age 20. So where does the idea of men suffering a menopause come from?

### Disease, Hormone Levels and HRT

Testosterone levels gradually reduce over time and that process may be naturally protective to the male body. For some men more drastic hormonal changes signal the presence of diseases such as hypogonadism. If testosterone is linked with decrease in sexual activity, declining muscle bulk, and reduction in minerals in bones, then theory improvements should be made with hormone replacement therapy (HRT).

This is not often the case however and there are significant risks in HRT such as non-cancerous growth of the prostate and excessive blood production. HRT in men has also been linked to prostate cancer and can exacerbate sleep apnea.

Medical opinion is divided. Treatment for men might be offered following investigation of symptoms and the doctor consulted.

### Menopause as a Psychological Event

The term male menopause has come about because so many men experience mid-life dissatisfaction and difficulties. For some men these issues become all consuming, hence the term midlife crisis.

Menopause is a word some people are using to express, amongst other things, unfulfilled desires and expectations, work dissatisfaction, the loss of passion in personal relationships and the loss of a positive body image as the ravages of time and abuse become glaringly obvious. The signs and symptoms signify menopause either as a disease or as a state of being.

- Depression, nervousness, Decreased libido
- Erectile dysfunction
- Decreased bone and muscle mass
- Flashes and sweats
- Tiredness and fatigue
- Poor concentration
- Increased body mass, fat

Men, like women, have to face change as they age and this is harder for some than others. Symptoms of possible disease do have to be investigated but be aware that the medicalization of life is leading us becoming a society of ‘pill poppers’.

Feel down, take a pill, unable to get a long and sustained erection, take a pill, feeling tired, take a pill. But at the end of the day a pill is just a pill and it won’t solve anything. Mid life is certainly a time for reflection, but be careful not to throw away the good things in your search for novelty, change, or the quest for youth.

Antioxidants improve male fertility

Taking supplements could increase chance of partner pregnancy

Men who take antioxidants may improve their fertility, according to recent research.

Antioxidants include natural and synthetic chemicals which help to reduce the damage caused by chemicals called reactive oxygen species. The latter are said to cause damage to sperm cells, which may result in lowered sperm counts and interference with their ability to fertilise eggs.

The review looked at 54 trials involving 2,876 couples undergoing in vitro fertilisation and sperm injections. Most men in the trials had low sperm counts or low sperm motility. The trials explored the use of many different types of oral antioxidants, including vitamin E, L-carnitine, zinc and magnesium.

### The best way to retain newly learned information is to take a nap, according to the latest research.

Experiments showed that the brain is better at resisting attempts at removing a recent memory during sleep, as opposed to when a person is awake.

Earlier research had shown that new memories stored in the hippocampus are fragile, and apt to be lost to new information when the person is awake.

Researchers had assumed that this would also be the case when a person was asleep, but were surprised to discover that in fact the brain was better at retaining newly learned information.

Twenty-four volunteers were asked to memorise 15 pairs of cards while being exposed to an unpleasant smell. A short while later, half of the subjects who stayed awake were asked to learn a slightly different card pattern while being exposed to the same smell.

The other twelve subjects performed the second exercise after a brief nap, but were also exposed to the same smell.

Both groups were then tested on the original card pattern, with the second group performing significantly better than the first – retaining 85 per cent of the pattern against 60 per cent of those who stayed awake.

The researchers assume that the reason the brain is better at retaining new information during sleep is that in the first few minutes of sleep, the information is passed from the hippocampus, where it is initially stored, to the neocortex, the site of longer term memory storage.

In fact, after a 40 minute nap, most of the new information was stored in the neocortex, where it could no longer be overwritten by new information stored in the hippocampus.

The researchers, from the University of Lubeck in Germany, where the experiments were conducted, said the discovery could pave the way for new approaches to learning memory intensive information, such as languages.
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