KERALA FEDERATION OF OBSTETRICS & GYNECOLOGY

KFOG JOURNAL

MIDLIFE MYSTERIES

November - December | 2022 | VOL: 16, No: 6

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MIDLIFE MYSTERIES

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Dr.Sareena Gilvaz
MD DGO
KFOG President

Hi friends
Menopause has long been in the shadows of myth and mystery. Today it's mysteries are being unravelled and a better understanding has dawned. The topics covered in this journal gives us a better perspective of some of the most intriguing aspects of midlife. Very apt,well chosen and well presented. Wishing this journal all the success

Regards
Dr Sareena Gilvaz
KFOG President

Secretary's MESSAGE

Dr Venugopal
Secretary KFOG

Dear Friends,

Hope that after covid all of you have become busier and more active than before. This edition of KFOG Journal focuses on Menopause and related issues. As always, Dr Suchitra and editorial team have an excellent compilation of articles in place. I wish to congratulate the entire editorial team and each and every contributor for their efforts. I am sure this edition will be a collectors item and the articles will provide plenty of tips for day to day practice. As this will be the last edition for 2022,I wish to extend advance new year greetings to you all and your family members.

Dr Venugopal

PATRONS *message*

DR PRESANNAKUMARI
Former Professor
O&G Medical college
Trivandrum and Calicut.
Past President KFOG

Dear friends,

I am extremely happy to appreciate the efforts taken by Dr Suchitra, Dr Deepthi and team in bringing out the KFOG journal by including various physical and mental health issues faced by women in midlife and how to succeed in overcoming those difficulties.

Attention to women's health is an important aspect in all stages of her life. But middle aged women, who falls under the age group of 40-50 years are the most under privileged and neglected ones in the society. They get the least attention and preferences when compared to other age groups. Middle age is the time when a woman needs more psychological and physical support from her family and friends.

The overall life of a woman will look smooth from outside. But it is very important to understand the complexities through which she undergoes. A woman of 40s and 50s will always be anxious about her family especially about her kids. Their education, job and marriage will be matters of great concern for them. Unmatched expectations may even lead them to a stage of anxiety which will in turn affect their health very adversely. Most ladies attain their menopause during this age. They will experience serious mental stress and tension during and after menopause. Menopause adversely affect almost all the systems. Decrease in bone strength, cardiac ailments and mental health problems are the main issues to be taken care of among middle aged women . Gynaecologists have a significant role in taking care of the problems in midlife .Methods to manage these problems should be planned well in advance. In fact, right from her childhood. Women should be educated about the problems which can occur amongst them at the time of menopause and the years following. I believe that through this journal we can bring out changes in the lives of women by offering them a shoulder of support and to bring up their confidence level to achieve greater heights.

B. Presannakumari

Dr Suchitra Sudhir
Editor
KFOG Journal

Editor's note

Dear Seniors , Teachers and Colleagues,

This time our KFOG Journal is based on a much neglected area... A transitional stage from Youth to Seniority... The Midlife, with all its mysterious changes.

These changes are physical, mental, emotional and social. Women are afraid of losing their femininity, their family gets scattered, sometimes loss of a spouse, all this may shatter their lives, health issues haunt them.....

But the show must go on, especially as we have to put up a good image in society... being part of so many programs and organizations, where everyone wants to look young and beautiful! This issue is the effort of a dynamic gynae, Dr Deepthi D Nair, who organized the topics and got the right writers to author the topics.

We have a panel of experts who will provide new insights into these topics during the release of this journal. My big thanks to our KFOG President, the ever generous Sareena mam and the versatile Secretary General, Dr Venugopal and the evergreen trio of Paily Sir, Sekharan Sir and Rajasekharan Sir...who are the pillars which uphold our Society, for their guidance, as always. My colleagues are our motivation ...
Thank you one and all.

With regards,
Dr Suchitra Sudhir
Editor
KFOG Journal

Associate Editor's note

Dr Deepthi Nair
Associate Editor
KFOG Journal

Respected Seniors and dear friends

We find ourselves at the end of another eventful year, at a time of celebrations and contemplation. And as the saying goes "Year-end is neither an end nor a beginning but a going on with all the wisdom that experience can instil in us".

This past year, we have explored the complexities of menopause, a previously unremarkable episode in every woman's life, which has now, through the efforts of our sought-after group of authors and their research efforts, been transformed into a singular and important moment in any woman's life, one that ushers in a new phase in her life, one where her voice must be heard.

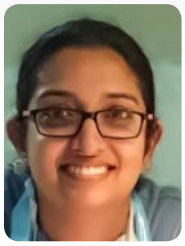
My sincere thanks to Suchitra madam, our most enthusiastic editor, who believed in me and entrusted me with the position of associate editor. She is an adept research scholar, brimming with novel ideas and is a great inspiration to all of us. I also take this opportunity to thank my mentor, my most beloved teacher, the exuberant Leader of KFOG, Sareena madam, our magnetic, dynamic secretory general Venugopal Sir and also to the pillars of the society Paily sir, Shekharan sir and Rajashekharan sir.

I would also like to express my gratitude to the charismatic, Dr Presannakumari madam for being a patron in this venture. Thank you all for your support without which this wouldn't have been possible.

Dr Deepthi Nair

Feminity FOREVER

FEMINEITY IS THE QUALITY, STATE OR DEGREE OF BEING WOMANLY.



Dr Asha Thomas
Amala medical college, Thrissur

In 1966, dr. Robert Wilson, a physician wrote a book titled " feminine forever " which stressed that femininity, both physical and emotional , is determined by the amount of estrogen in the body. He described menopause as "a serious, painful and often crippling disease" and advocated the off label use of HRT to not only treat the distressing symptoms of menopause but also to maintain their youth. This book targeting on every woman' s deepest fear of losing their feminity resulted in a surge in hormone replacement therapy use and with it all the unwanted long term effects in force. The reproductive years of a woman s life are regulated by the production of estrogen and progesterone by the ovaries. Estrogen regulates the menstrual cycle and secondary sexual characteristics in addition to preparing the body for fertilization and reproduction

Towards reaching menopause, the levels of estrogen and progesterone fall due to reduced synthesis in the ovary leading to various symptoms of varying severity.

The changes include loss of collagen, elastin, fibroblast function, vascularity, and increased matrix metalloproteinase(s) enzymatic activities, resulting in cellular and extracellular degradation that leads to dryness, wrinkles, atrophy, impaired wound healing/barrier function, decreased antioxidant capacity [i.e., defense against reactive oxygen species (ROS) and oxidative stress], decreased attractiveness and psychological health, and increased perception of aging.

HRT use decreased sharply when the connection between use of synthetic estrogen and elevated risk of endometrial cancer was recognized in the 1970's. Use of HRT has slowly gone up since the 1980's, when long-

term research established the protective effects of HRT against osteoporosis and possibly heart disease. Addition of progesterone helped in protecting against endometrial cancer. Over the years, HRT became popular as it was recommended not only for menopausal symptoms but also for providing long term protection against osteoporosis and related fractures, heart disease and even Alzheimer disease. However in 2002, the Women's Health Initiative (WHI), a large scale study was stopped early because of slightly increased risk of heart disease, stroke and breast cancer.

Hormone therapy can be prescribed as local (creams, pessaries, rings) or systemic therapy (oral drugs, transdermal patches and gels, implants). It can be

- Estrogen alone
- Combined estrogen and progesterone
- Selective estrogen receptor modulator
- Gonadomimetics – such as tibilone – contains estrogenic, progestogenic and androgenic properties

The various schedules of hormone therapy include

- Taking estrogen daily
- Cyclic or sequential regimes in which progestogen is added for 10-14 days every 4 weeks
- Continuous combined regimens in which estrogen and progestogen are taken daily

Estrogen prescribed most commonly are conjugated estrogen – equine (CEE) or synthetic – micronized 17 estradiol or ethinyl estradiol.

Progesterones used are medroxyprogesterone acetate or norethisterone enanthate. The levonorgestrel intrauterine system licensed for 4 years can also be used along with estrogen.

RISKS

HRT risks included increased risk of venous thromboembolism with oral HRT compared to baseline population. Transdermal HRT should be considered at standard doses if there is increased risk of thromboembolism or BMI >30kg/m2

Cardiovascular risk is not increased if the HRT is started under the age of 60 years or giving HRT within 10 years of menopause as analysed from the Women's Health Initiative study. Oral estrogen is associated with an increase in the risk of stroke but no increase in risk of coronary artery disease.

Combined estrogen and progesterone HRT can be associated with an increase in risk of breast cancer and is related to treatment duration and excess risk persists even after stopping HRT.

HRT is most effective for reducing vasomotor symptoms which affect 70% of menopausal women. There is a significant benefit and reduction in risk of fractures after 5 years of use. There is limited evidence of improvement in muscle mass with HRT. There is no indication for HRT for primary or secondary prevention of cerebral vascular disease or dementia or for protection of cognitive function.

If HRT is started under 50 years, then it should be continued till the age of 50 or for at least 3 years if started after 50. Vaginal estrogens require long term use to actualize the benefits. If starting in the perimenopausal state, its better to start sequential or cyclical HRT ie continuous for 12-14 days/month followed by review after 3 months then annually if there is symptomatic improvement. The lowest dose for the least duration should be used. In hysterectomized women, estrogen only HRT is required, however in women with subtotal hysterectomy, if no endometrium identified histologically at lower resected margin, then estrogen only HRT is required.

MENOPAUSE & SEXUAL DYSFUNCTION

Sexuality is important across menopause and beyond and is strongly related to the quality of life. Symptoms of sexual dysfunction must be delicately addressed to all women particularly if surgical menopause. Age and declining levels of sex hormones have detrimental effects on sexual functioning with significant increase in vaginal dryness/dyspareunia and decrease in desire and sexual responsiveness. HRT with estrogen alone or in combination with progestogens is associated with a small improvement in sexual function. Tibolone is also found to be of value in managing sexual dysfunction along with psychosexual strategies tailored to the woman's needs.

Hypoactive sexual desire disorder or HSD affecting 32% of women in the age group of 40-64 can be managed effectively with continuous testosterone therapy with statistically significant improvements in sexual satisfaction, desire and pleasure after ruling out dyspareunia, depression and relationship issues, by acting on the central nervous system to increase dopamine levels. Side-effects of testosterone are dose related and can be avoided by using formulations like transdermal routes which pose no increase in breast cancer risks. If no significant benefit is obtained by 6 months of testosterone use, it should be discontinued.

Newer formulations and dosing regimens have helped to better tailor HRT to patient needs but controversy still exists regarding the risks and benefits. All women presenting with climacteric symptoms must be evaluated vigilantly with a detailed history and examination before considering starting HRT, the dose formulation and duration. There is no role in starting estrogen purely for the purpose of enhancement of beauty and a feeling of well-being. Moreover in the present day gender neutral society, femininity is deemed archaic and a socially contructed concept rather than the identity of a person.

References;

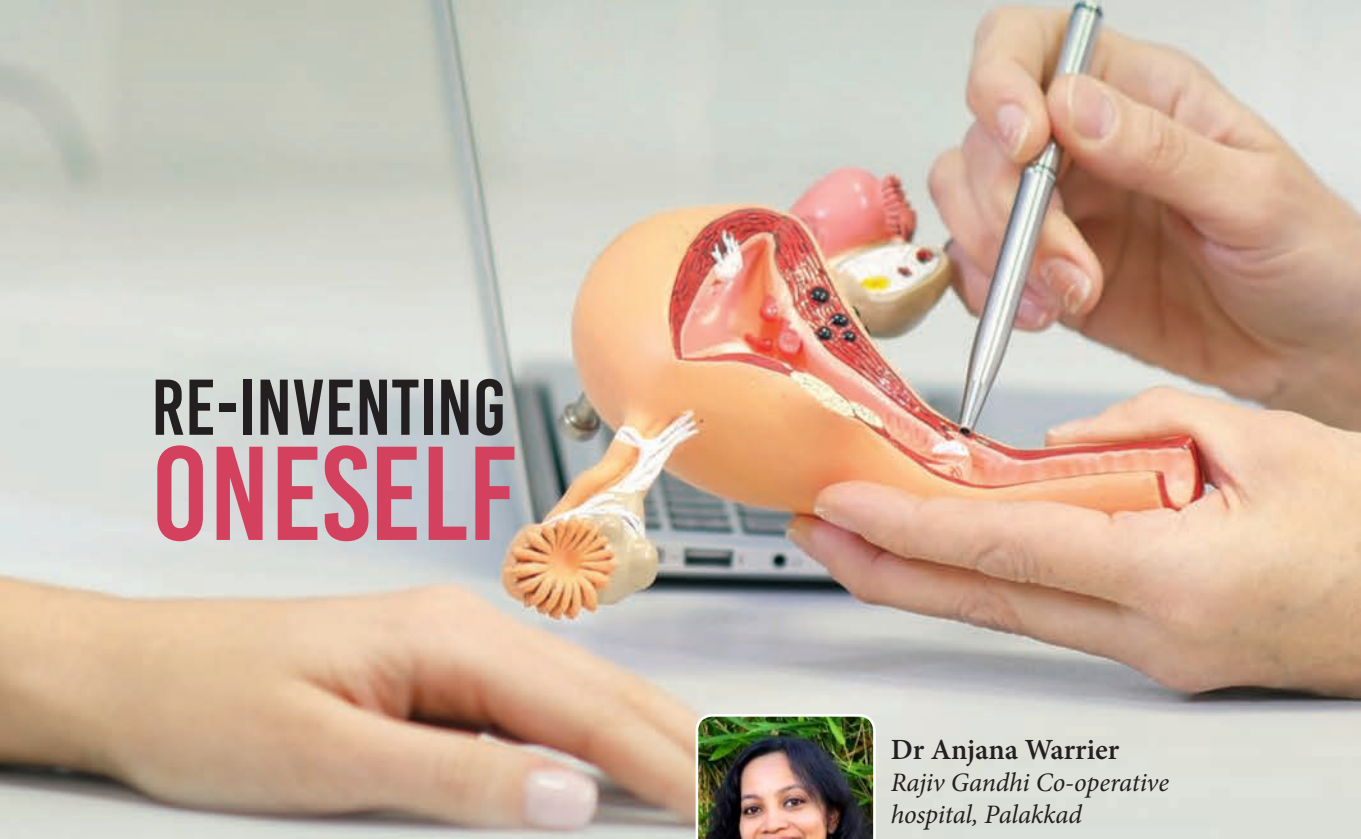
1.R. J. Baber, N. Panay & A. Fenton the IMS Writing Group (2016) 2016 IMS Recommendations on women's midlife health and menopause hormone therapy, Climacteric, 19:2, 109-150, DOI: 10.3109/13697137.2015.1129166

2.NICE guidelines. Menopause: diagnosis and management ng23

3:Bakour SH; Williamson J. Latest evidence on using hormone replacement therapy in the menopause. The Obstetrician & Gynaecologist 2015;17:20–8.

4.The 2022 hormone therapy position statement of The North American Menopause Society. Menopause (New York, NY). 2022;29(7):767-794. doi:10.1097/GME.0000000000002028

RE-INVENTING ONESELF



Dr Anjana Warrier
Rajiv Gandhi Co-operative hospital, Palakkad

Cosmetic gynaecology is one of the fastest growing branches in women's healthcare.It spans over gynaecology, uro-gynaecology, dermatology, vascular and plastic surgery. Apart from cosmetic procedures, presently it includes functional vulvo vaginal repairs to restore the anatomy and physiology following trauma of child birth, menopause and aging. Nowadays an average woman is expected to spend 1/3rd of her life in the post-menopausal phase. So the usefulness of these procedures cannot be understated. Mostly females seeking aesthetic and re-generative treatment may present with decreased sexual satisfaction on the part of self or partner, feeling of vaginal laxity, painful coitus or dryness, urinary symptoms or other problems associated with aging.

The procedures that can be performed under aesthetic and regenerative gynaecology may be surgical or minimally invasive non surgical techniques. These may be used for cosmetic or functional indications.

Female cosmetic gynaecological surgery (FCGS) is a non medically indicated cosmetic surgery on healthy vagina. As these are done on healthy organs, there is a debate that these procedures come under FGM (Female Genital Mutulation) as described by the WHO under current regulations.

	TYPE OF PROCEDURES	PURPORTED BENEFIT	PROCEDURES USED	REPORTED OR POTENTIAL COMPLICATIONS
SURGICAL PROCEDURES	Clitoral hood reduction	To improve sexual function by increasing sensitivity and allowing more clitoral contact	Hoodectomy Note:often combined with labiaplasty to create labia minora symmetry and prevent clitoral hood sagging	• Scarring • Infection • Hematoma • Hypersensitivity • Damage to the glans
	Labiaplasty	To eliminate unwanted tissue of the labia minora or labia majora	• Trim or edge resection • Wedge resection using a V-shaped or Y-shaped incision • Z-plasty • De-epithelialization	• Scarring • Infection • Hematoma • Hypersensitivity • Damage to the glans
	Labia majora augmentation	To create a full , symmetric look	• Autologous fat transplantation • Injectable fillers (hyaluronic acid)	Palpable fatty cysts
	Hymenoplasty	To recreate the virginal state of the hymen; has cultural roots in regions that place a value on an unmarried womans virginity	Reconstruction of hymenal remnants, vaginal mucosal flaps or both	Wound dehiscence
	Vaginoplasty	To tighten vaginal contour and increase sexual satisfaction	• Anterior,posterior or lateral colporrhaphy • Rugation restoration • Energy based devices	• Infection • Dyspareunia • Dehiscence • Fistula
ENERGY BASED INTERVENTION	Energy-based vaginal procedures	To tighten vaginal contour and increase sexual satisfaction	• Laser • Radio frequency	• Burns • Scarring • Pain during sexual intercourse • Recurring or chronic pain
INJECTIONS	G-spot amplification	To augment G-spot and heighten sexual satisfaction	• Autologous fat transfer • hyaluronic acid	Infection

1. SURGICAL

- Labia Minora plasty
- Labia majoraplasty
- Clitoral hood reduction
- Clitoroplasty
- Vaginoplasty
- Hymenoplasty
- Perineoplasty

2. NON-SURGICAL LASERS- ERBIUM YAG, CO2 LASERS

- Labial whitening
- Labial enhancement
- Vaginoplasty
- G-spot augmentation
- O-spot augmentation

3. FILLERS:

- Botulinum toxin
- Hyaluronic acid

4. REGENERATIVE COSMETOLOGY WITH THE USE OF:

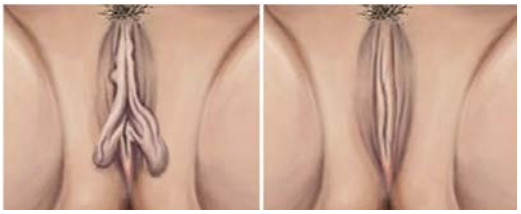
- Fat graft
- Platelet-rich plasma (PRP)
- Stem cells
- Amniotic fluid
- Amniotic membrane

WHAT IS VAGINAL REJUVENATION?

It is a generalized term for a wide array of gynaecological, aesthetical & functional procedures that aim to restore the vagina and its surrounding tissues. These can range from mere vaginal atrophy treated by minimally or non invasive strategies to invasive interventions like labiaplasty or vaginoplasty.SURGICAL PROCEDURES

As the patient is not suffering from any disease, it is necessary to have a detailed counselling and documentation of the

discussion before surgery. A thorough history and physical examination is mandatory. Expectations and motivations need to be explored before the surgery. Unrealistic expectations can never be met even if the surgery is done to perfection.



(Before and after Labiaplasty)

MINIMALLY INVASIVE PROCEDURES

LASERS –(Light Amplification by Stimulated Emission of Radiation)

They are a form of electro magnetic energy and are of different types namely Carbon dioxide Laser, Erbium YAG laser, fractional laser or diode laser.

Fractionating the ablative laser into small micron sized spots allows rapid re epithelialization derived from the undamaged epidermal islands separating the ablated microscopic treatment zones (MTZ). It helps in remodelling of collagen and elastin fibres resulting in tightening and textural improvement of skin.

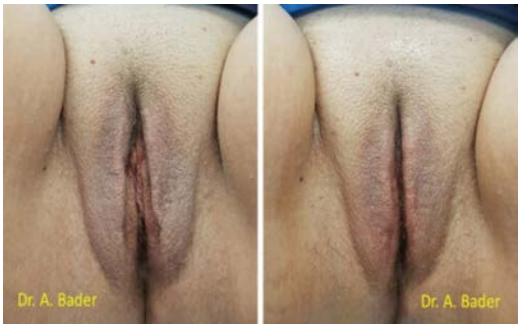
Histologic changes seen with Lasers and other Energy Based Devices

An inflammatory and wound healing pathway is initiated which stimulates the underlying tissues to heal with increased collagen and elastin, increase in fibroblasts and improved vascularity. There occurs thickening of stratified squamous epithelium, closed pack basal cell layers and increased papillary projections with blood capillaries. The biomolecular effects of EBD are mediated by heat shock protein ,various chemokines ,cytokines and growth factors.

All these result in improvement in dryness, pain and urinary symptoms.

Adverse effects following laser treatment

Usually the treatment-related side effects were mild like itching, discomfort, soreness or burning sensation with urination. Rarely they can also result in potential complications like scarring, infection, pain, respiratory hazards, ocular hazards or combustion hazards.



(Before and after Laser Therapy)

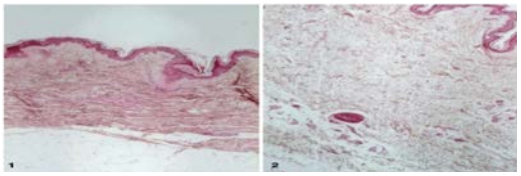
RADIO FREQUENCY

Radio frequency is the term aimed to describe the transfer of energy in the form of radio waves which is a non ionizing radiation and hence considered safe .Radiofrequency can induce several phenomena on biological tissues namely ablation, coagulation or hyperthermia. If the temperature is elevated only to lower levels and maintained it over sometime ,a non ablative thermal dependant effect will occur that involves inflammation ,collagen contraction and fibroblast stimulation. These effects are made useful for vaginal rejuvenation procedures ,tightening of the vagina Canal, correction of mild sui, tightening of clitoral hood and minor Improvement in labia minora pigmentation.

CARBOXY THERAPY

Carboxy therapy refers to the administration of CO2 transcutaneously for therapeutic purposes. Carboxy therapy is used in aesthetic gynaecology for its properties of improving tissue perfusion

and partly increasing transcutaneous PO2 due to the hypercapnia induced rise in capillary blood flow .It has also been found that carboxytherapy has lytic effect on adipocytes and has role in collagen synthesis which results in increased skin elasticity leading to tightening of skin. Carboxy therapy has been successfully used for skin rejuvenation(flaccidity), peri orbital area wrinkles, localised adipocytes, stretch marks, chronic wounds or with skin grafts.



(Histologic changes in the dermis before and after Carboxy therapy)

HIFU (HIGH INTENSITY FOCUSED ULTRASOUND)

Unlike laser or radio-frequency, the sound is not an electromagnetic wave form but a form of acoustic energy with a frequency range more than 20 KHz. Magnetic resonance guided focused ultrasound was granted FDA approval in 2004 for the management of uterine fibroids .It was in 2016 that HIFU technology was introduced for vaginal rejuvenation, but still lacks sufficient evidence. A prospective study of GSM and mild in postmenopausal females showed vaginal epithelial changes resulting in improvement of symptoms .Thus it has been proposed that this can be as effective as lasers or radio frequency and may serve better to reach the deeper layers.

HIFEM

In High Intensity Focused Electromagnetic technology(HIFEM) , a rapidly varying magnetic field passes non-invasively through the neuromuscular tissue and induces an electric current to the target tissue. It utilizes the principles of electromagnetic induction to depolarize motor neurons thus stimulating intense involuntary muscle contractions.This is the principle behind the now popular Emsella chairs which uses this property to deliver current selectively to the pelvic floor muscles without affecting the skin which makes it superior, inducing maximal voluntary contractions. HIFEM has also shown to be effective and a promising alternative for improvement of female sexual function by strengthening the pelvic floor muscles

LED

Another energy based device that requires mention at this point is the Light Emitting Diode, which are either continuous or pulsed. They are usually the blue,yellow,red or near infrared spectrum.A preliminary study has shown to be very effective in vulvo vaginal candidiasis, where the micro flora and the ph remained normal after therapy. Along with that, it was observed that all patients showed improvement in vaginal tissue quality with increased tissue thickness and vascularity with improvement in vaginal lubrication and sexual function. Overall, researchers suggested that this could be a cheaper and safer alternative to other EBD.

NON ENERGY BASED MODALITIES IN COSMETIC GYNAECOLOGY

Newer non invasive non energy based modalities are gaining popularity due to their advantages of minimal side effects, patient compliance and lesser time consumption.

Some of the popular modalities are:

FILLERS

Hyaluronic acid or Fat(micro fat or nano fat) are the usual molecules used as fillers. They are used for Labial augmentation,

vulvo vaginal atrophy or even GSM.

Hyaluronic acid acts as a space filler as well as binds to water, thereby decreasing dryness. Fat transfer (lipo filling) , an autologous procedure also gives improved results and can be combined with other procedures like PRP injections.

G SHOT is a trademark term that refers to the injection of fillers into the g spot to improve female sexual gratification.

BOTULINUM TOXIN

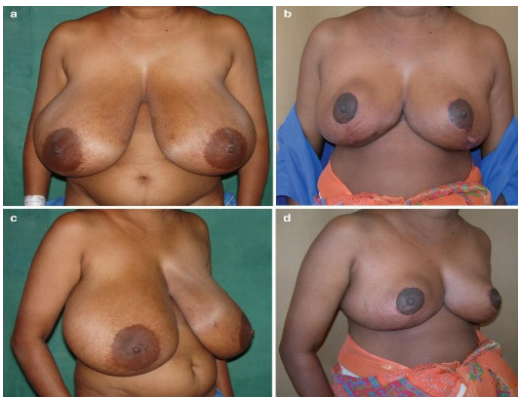
Botox injections are used to treat various cosmetic and gynecologic problems like Postmenopausal hyperhidrosis, facial wrinkles, vaginismus , overactive bladder etc.

Botulinum toxin injection for treatment of facial wrinkles is the most frequently performed cosmetic procedure in the United States. Treatment of frown lines and crow's feet, which are the cosmetic indications approved by the U.S. Food and Drug Administration, offers predictable results, has few adverse effects, and is associated with high patient satisfaction. Botulinum toxin is a potent neurotoxin that inhibits release of acetylcholine at the neuromuscular junction that causes localized muscle relaxation that smoothens the overlying skin and reduces wrinkles.

However, the effects of the currently approved botulinum toxin products typically wear off in about 3–4 months after injection. A new product called DAXI (DaxibotulinumtoxinA for Injection) has been developed to make its effect last longer.

BREAST LIFTING AND REDUCTION PROCEDURES

Young women usually have dense breasts because of the predominance of glandular tissue When women grow old, the glandular tissue shrinks and fat takes its place .By the time women attain menopause their breasts are completely soft. Pregnancy, lactation ,weight gain or loss can also affect the size and shape of breast. The principal aim of breast reduction and uplift is to reposition the droopy breast into a better positioned and uplifted breast with nipple pointing forward and outward. The procedures include repositioning Breast areola Complex on a vascular pedicle and reshaping the breast. In uplift procedures volume is maintained whereas in augmentation mastopexy it is combined with an implant to add volume. In breast reduction, adequate excision of the breast tissue is also done. Apart from the Cosmetic aspects, women can also present with neck pain back pain formation of grooves in the shoulder,sub mammary intertrigo or even paresthesia over fingers and hands due to traction on the brachial plexus.



(Before and after Breast reduction surgery)

GLUTEAL RECONTOURING SURGERIES

The ideal waist hip ratio is considered to be 0.7.For practical purposes,the gluteal region is divided into many aesthetic zones. these zones are considered during surgical planning and the junctions of the units can act as a guide for incision placement during the procedures. Initially the frame type of

the individual is determined. Understanding the aesthetic units and the framework helps you to determine the areas that will benefit from liposuction, fat transfer or gluteal augmentation.

The gluteal recontouring surgeries are:

- Implants
- Autologous fat grafts
- Autologous gluteal flap augmentation

The Implants generally used are soft solid silicone elastomer implants. Autologous fat grafting is where fat is harvested from the same person by liposuction , fat preparation is done and is injected back into the body. Autologous gluteal flap is ideal for massive weight loss patients who lack sufficient fat content for grafting and in whom the traditional body lift surgeries do not correct the lack of volume in those areas.

THREAD LIFT IN AESTHETIC GYNECOLOGY

The desire to lift a sagging face has been ever increasing and so has the interest in various non-surgical and minimally invasive modalities. In the late 1990s PDO(Polydioxanone) threads were initially used to lift the ptotic facial tissues. They are placed along certain vectors into the subcutaneous tissue where they relay on the trabecular connective tissue network that runs between the SMAS(superficial musculo aponeurotic system) and the skin and are pulled to lift the sagging skin .Due to advancement in technology newer variations of threads have come into being. The types of threads can be absorbable or non-absorbable, barbed or non barbed, long or short. The immediate effect is due to the mechanical properties and the lifting effect is due to fibrosis. Nowadays thread lift is widely being popular for vagina tightening as well. Mechanotransduction- the ability of cells to sense, process and respond to mechanical stimuli, is what is utilized in these thread lift procedures .

CHEMICAL PEELS

Chemical peels form an integral part of Dermatology and aesthetic medicine practice ,the history of which dates back to ancient Egyptians (around 1500 BC) Legend has it that Cleopatra used to bathe in sour donkey milk.(it contains lactic acid that has skin rejuvenating properties) . Chemical peels involve application of a keratolytic or caustic chemical agent(salicylic acid, mandelic acid, kojic acid etc) to instill a controlled injury or ablation till a specific depth of skin which leads to regeneration of skin by means of controlled wound healing and subsequent improvement in skin texture and appearance without significant side effects. Peels can be classified based on the active ingredients used. Peels can be superficial, medium or deep depending on the depth of penetration. They have been found useful in conditions like acne,melasma, photodamaged skin, hyperpigmentation, freckles, wrinkles, scars and even premalignant skin lesions like actinic keratosis. Concepts like “party peels” and “office peels” are also gaining popularity now a days.

ANDROGEN THERAPY

Thus far, the only evidence-based concern in postmenopausal women, with data of adequate breadth, that have shown improvement with testosterone therapy are bothersome low sexual desire and the genitourinary syndrome of menopause. The Endocrine Society and the American Congress of Obstetricians and gynecologists supports the use of androgens in post menopausal women only for HSDD(hypoactive sexual desire disorder). The US FDA has not currently approved its use due to lack of long-term data on its safety and efficacy.

RECENT ADVANCES IN AESTHETIC GYNECOLOGY- PRP (PLATELET RICH PLASMA) THERAPY AND STEM CELL THERAPY

PRP therapy has already gained popularity in the treatment of various medical and cosmetic concerns. Plasma is said to have 5 to 10 times higher concentrations of growth factors. Autologous PRP is derived from the individual and is utilised by aesthetic gynecologists for vaginal rejuvenation (improves vaginal lubrication and sensitivity) labial augmentation, breast reconstruction or O SHOT therapy.O SHOT is where PRP is injected into the clitoris and upper vaginal wall which is said to improve sexual dysfunction and milder degrees of urinary incontinence by using ones own growth factors.

Stem cells are attractive candidates for the development of novel therapies, targeting indications that involve functional restoration of defective tissue. Most stem cell therapies are new and highly experimental. Of the different types of stem cells, of particular clinical interest are the MSCs(Mesenchymal Stem Cells). MSCs have the capacity to differentiate into bone, cartilage, muscle, and fat. Cell assisted lipotransfer (CAL)is where the stromal vascular fraction containing MSCs are isolated from a portion of the aspirated fat and then recombined with the remaining fat prior to injection (in Autologous Fat Grafting). Although holding tremendous promise, the clinical use of stem cells in aesthetic surgery is still in its infancy. We must be vigilant to avoid unscientific claims which may threaten this nascent field.

MEDICO LEGAL ASPECT OF COSMETIC GYNAECOLOGY

Medico legally, these procedures are different from other surgeries due to the fact that they are done on demand by the patient for purely cosmetic reasons. A lot of medico legal dilemmas arise in this field. Medical counselling, financial counselling and psychological counselling play a vital role in management. Detailed informed consent has to be taken for surgical as well as non surgical treatment. Consent should include the purpose of treatment, the details of the procedure, alternatives available, the success or failure rates, risks or side effects, and also regarding risks of not undergoing the procedure.

The four principles of ethics are namely principle of autonomy, beneficence, non maleficence and justice. Sometimes there occurs situations where there is direct conflict between the principles and we need to take a stand. The healthcare provider has to be honest . Documentation should be accurate in chronology, complete and legible without any extraneous information. While litigations are relatively common in aesthetic gynecology, they are mainly the consequence of problems surrounding patient selection and communication and not due to errors or adverse events. Thus a detailed counselling, communication and documentation must be a part of our routine practice.

REFERENCES

McArdle A, Senarath-Yapa K, Walmsley GG, Hu M, Atashroo DA, Tevlin R, Zielins E, Gurtner GC, Wan DC, Longaker MT. The role of stem cells in aesthetic surgery: fact or fiction? Plast Reconstr Surg. 2014 Aug;134(2):193-200. doi: 10.1097/PRS.0000000000000404. PMID: 24732654; PMCID: PMC4447486.

Vegunta S, Kling JM, Kapoor E. Androgen Therapy in Women. J Womens Health (Larchmt). 2020 Jan;29(1):57-64. doi: 10.1089/jwh.2018.7494. Epub 2019 Nov 5. Erratum in: J Womens Health (Larchmt). 2020 Nov;29(11):1487. PMID: 31687883.

Juhász MLW, Korta DZ, Mesinkovska NA. Vaginal Rejuvenation: A Retrospective Review of Lasers and Radiofrequency Devices. Dermatol Surg. 2021 Apr 1;47(4):489-494. doi: 10.1097/DSS.0000000000002845. PMID: 33165070.

Textbook of Aesthetic and Regenerative Gynecology by Preeti Jindal, Narendra Malhotra, Shashi Joshi

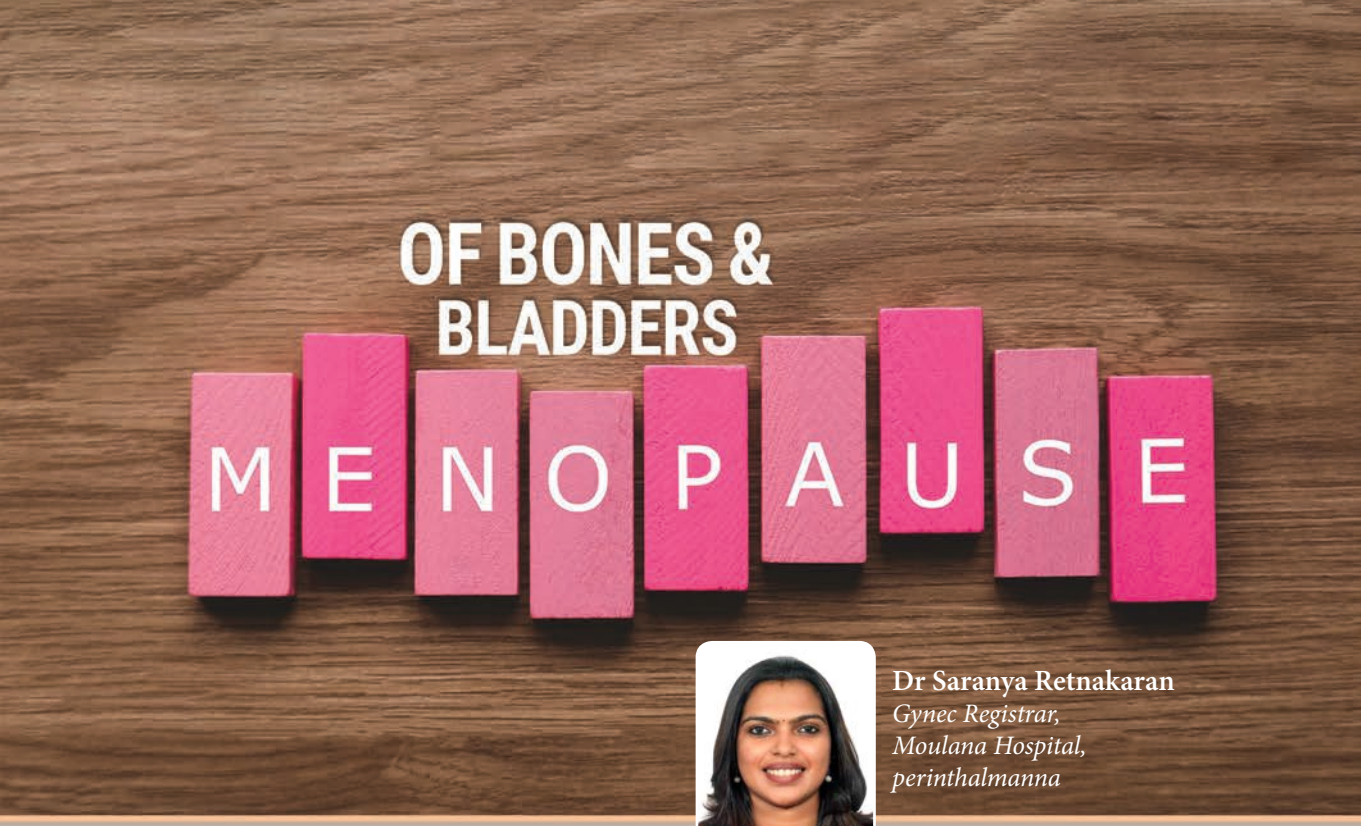
Hoss E, Kollipara R, Fabi S. Noninvasive Vaginal Rejuvenation: Radiofrequency Devices. Skinmed. 2019 Nov 1;17(6):396-398. PMID: 31904331.

Ramanadham SR, Rose Johnson A. Breast Lift with and without Implant: A Synopsis and Primer for the Plastic Surgeon. Plast Reconstr Surg Glob Open. 2020 Oct 28;8(10):e3057. doi: 10.1097/GOX.0000000000003057. PMID: 33173660; PMCID: PMC7647657.

Small R. Botulinum toxin injection for facial wrinkles. Am Fam Physician. 2014 Aug 1;90(3):168-75. PMID: 25077722.

Solish N, Carruthers J, Kaufman J, Rubio RG, Gross TM, Gallagher CJ. Overview of DaxibotulinumtoxinA for Injection: A Novel Formulation of Botulinum Toxin Type A. Drugs. 2021 Dec;81(18):2091-2101. doi: 10.1007/s40265-021-01631-w. Epub 2021 Nov 17. PMID: 34787840; PMCID: PMC8648634.

OF BONES & BLADDERS



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Preventing bone loss is an important concern for women in the menopause journey and during post-menopausal stages. Menopause significantly speeds bone loss and increases the risk of osteoporosis. Research indicates that up to 20% of bone loss can happen during these stages and approximately 1 in 10 women over the age of 60 are affected by osteoporosis worldwide.

One in two postmenopausal women will have osteoporosis, and most will suffer a fracture during their lifetime.

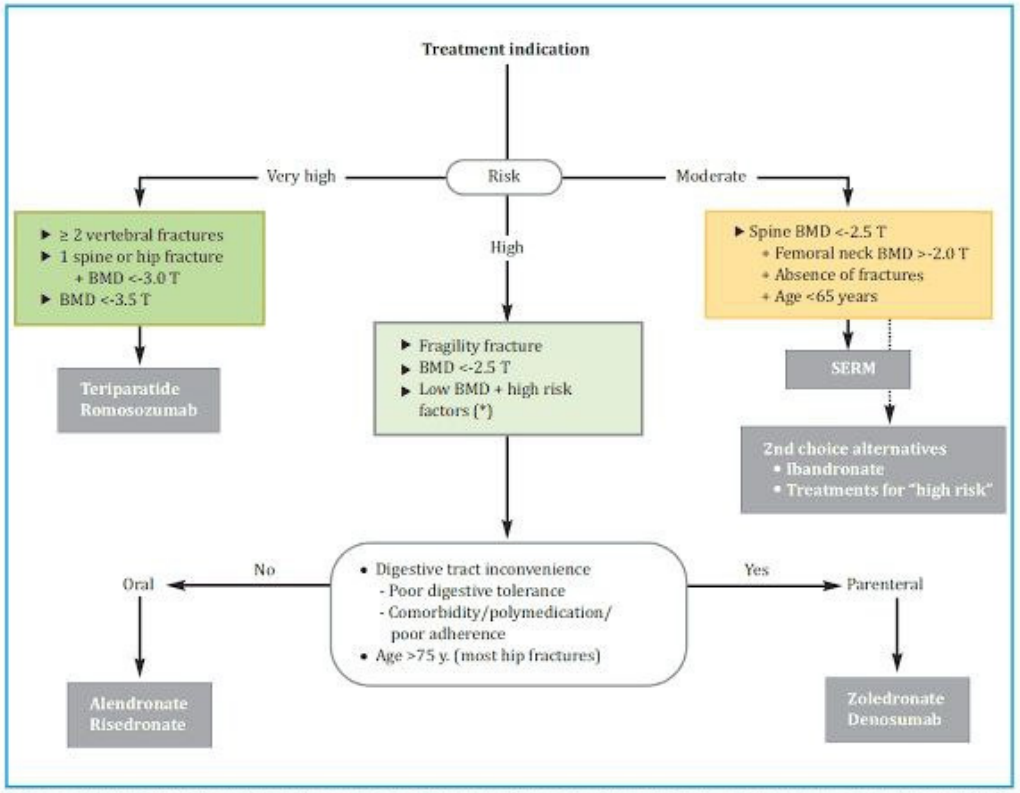
It is never too late to be treated for osteoporosis, and in fact, older women are more likely to respond better to treatment if given early.

Menopause is the most common cause of osteoporosis. As hormones change to accommodate normal menopausal changes, estrogen levels start to fluctuate and then drop. Since estrogen helps prevent bones from getting weaker by slowing the natural breakdown of bone, its reduction during menopause significantly speeds up bone loss.

Estradiol is one of three estrogen hormones naturally produced in the body. The effects of estradiol are clearly seen in women experiencing menopause. During this process, women naturally have lower levels of estradiol as the ovaries no longer produce it, causing the menstrual cycles to stop. This change often causes mood swings, vaginal dryness, hot flashes, and night sweats — the symptoms commonly associated with menopause. Over time, lower estradiol levels can lead to osteoporosis.

Vitamin D and calcium are other hormones that play a part in bone health. Vitamin D allows your body to absorb calcium. Calcium is necessary for building strong, healthy bones. Without enough vitamin D and calcium, bones may not form properly in childhood and can lose mass, become weak, and break easily in adulthood. Even if you get enough calcium in your diet, your body will not absorb that calcium if you don't get enough vitamin D.

Figure 1. Algorithm for selection of initial treatment in postmenopausal osteoporosis



(*): especially if T ≤-2 and factors strongly associated with fracture risks, such as hypogonadism, early menopause, or treatment with glucocorticoids or sex hormone antagonists. These general criteria may need to be adapted based on other clinical determinants of fracture risk, the characteristics of individual patients, and their preferences.
BMD: Bone mineral density, fx: fracture, SERM: selective oestrogen receptor modulator.

AVAILABLE TREATMENTS FOR POSTMENOPAUSAL OSTEOPOROSIS

- **Non-pharmacological interventions**
  A balanced diet should be maintained, with a contribution of 1-1.5 g/kg of protein, regular physical exercise, and avoiding tobacco and excessive alcohol consumption. Fall prevention programmes and hip protectors may be helpful.
- **Calcium and vitamin D**
  Patients treated with drugs for osteoporosis should have an adequate intake of calcium and vitamin D [3,4] to attain serum levels of 25OHD>25-30 ng/mL. The generally recommended dose of vitamin D is 800-1200 IU/d (or weekly or monthly equivalent). Calcium intake should be 1000-1200 mg/day, preferably through diet and supplements if needed.
- **Oestrogen therapy**
  oestrogen therapy effectively prevents fractures, but its side effects have prevented it from being recommended as an osteoporosis treatment, except in cases of early menopause or when other alternatives are not available.
- **Selective oestrogen receptor modulators**
  Selective oestrogen receptor modulators (SERMs) increase spinal BMD. Raloxifene and bazedoxifene reduce vertebral fracture risk by 40% but do not influence nonvertebral fractures [5]. Its main complication is an increased risk of venous thromboembolic disease.

- **Bisphosphonates**
- **Alendronate**
  Alendronate at 70 mg/week reduces vertebral, nonvertebral, and hip fractures by around 45%, 25–30%, and 45–55%, respectively a treatment period of 3–5 years. prolonged administration may sometimes be recommended.
- **Risedronate**
  According to recent meta-analyses, risedronate reduces the risk of all fractures (vertebral 39%, hip 27% and non-vertebral 22%) [5]. It is administered in doses of 35 mg weekly or 75 mg two consecutive days per month.
- **Ibandronate**
  This agent is less effective than other bisphosphonates (BPs) and does not appear to reduce nonvertebral fractures.
- **Zoledronate**
  Zoledronate at 5 mg/year intravenously reduces vertebral, non-vertebral and hip fractures by 70%, 25%, and 40%, respectively

Adverse effects of bisphosphonates

Oral BPs can cause esophagitis. It should be avoided in patients with difficulty swallowing or Barrett's oesophagus. Acute-phase reaction or self-limited flu-like symptoms are common after the first dose of zoledronate. BPs are not recommended in patients with a glomerular filtration rate (GFR) ≤30 mL/min. Intravenous BPs can cause hypocalcaemia, especially in patients with renal failure or insufficient intake of vitamin D or calcium.

Osteonecrosis of the jaws (ONJ) is rare but potentially severe

Atypical fractures of the femur (AFF) occur in 1-2 cases per 10,000 patients treated with BP. The risk increases with exposure time; however, this risk is very low compared to the risk of osteoporotic fractures

- **Denosumab**
  Denosumab reduces the risk of vertebral, non-vertebral and hip fractures by around 70%, 20%, and 40%, respectively [9]. It is generally well tolerated. The risks of AFF and ONJ are very low, Denosumab can be used in patients with kidney failure. An adequate supply of calcium and vitamin D must be ensured to avoid hypocalcaemia.
  After discontinuation, an increase in bone turnover markers (BTM) and a loss of BMD gained are observed. In some patients, this phenomenon is associated with multiple vertebral fractures.
- **PTH 1-34 (teriparatide)**
  Teriparatide exerts a bone-forming effect and reduces vertebral fracture risk by 65% and non-vertebral fractures by 50%. It was shown to be more effective than risedronate in women with severe osteoporosis.
- **Abaloparatide**
  Abaloparatide reduces vertebral and non-vertebral fractures
- **Romosozumab**
  Romosozumab is a sclerostin-neutralising antibody with dual anabolic and antiresorptive effects.
  According to several meta-analyses ,this agent reduces vertebral (66–73%), non-vertebral (33%), and hip (56%) fractures. it is contraindicated in patients with a history of myocardial infarction or cerebrovascular accident and should be considered carefully in those with multiple cardiovascular risk factors.
- **Vertebroplasty and kyphoplasty**
  They can be considered in patients with fractures less than 6 weeks old and severe pain despite medical treatment and in patients with fractures from 6 weeks to a year of evolution and persistent pain that responds poorly to analgesics if one show signs of oedema on MRI.

DIAGNOSIS

- Dual Energy X-Ray (DEXA) is preferred method
- Hip and lumbar bone mineral density measurements most accurate
- Osteoporosis diagnosed with T Score ≤–2.5
- T-score between –1.0 and –2.5 and increased risk of fracture using a formal clinical risk-assessment tool such as the US Fracture Risk Assessment (FRAX) tool
- Clinically diagnosed if patient has a fragility fracture
- Fracture occurs after a fall at less than standing height
- Usual site: Hip | Humerus | Rib | Pelvis | Wrist | Spine
- Includes asymptomatic vertebral fracture

Treatment

- Lifestyle Modifications
- Weight bearing exercises
- Adequate intake of vitamin D and calcium

URINARY INCONTINENCE & BLADDER ISSUES CONDITIONS MENOPAUSE & URINARY SYMPTOMS

Changes in a woman's urinary function often accompany menopause. A primary cause is urogenital atrophy, which is the deterioration of the urinary tract and vagina.

Menopause reduces the amount of the female hormone estrogen, and a lack of estrogen reduces the urinary tract's ability to control urination. Advanced age, which usually coincides with menopause, also has various debilitating effects on the pelvic area organs and tissues.

Causes of menopausal urinary symptoms

When menopause occurs, estrogen production is reduced, which is the major cause of urogenital atrophy. Atrophy means a wasting away of muscle mass, and urogenital atrophy involves atrophy of the vagina as well as atrophy of the urinary tract.

The lack of estrogen weakens the bladder (which holds urine) and the urethra, the tube that carries urine out of the body, compromising their ability to control urinary functions. Reduced estrogen also alters the acidity of the vulva and the vagina, which can make the area more prone to infection by bacteria or yeast overgrowth.

Menopausal urinary symptoms can also be caused by pelvic organ prolapse, in which one or more organs of the pelvic area drops down into the vagina. This can be due to stress from vaginal childbirth that becomes evident after menopause. Such stress may also cause damage to pelvic floor muscles, also resulting in urinary problems. Whether specific urinary symptoms are related to menopause, aging or a combination of the two is the subject of continuing study.

Symptoms related to urinary atrophy are:

- Stress incontinence: laughing, coughing or sudden movement.
- Urge incontinence (irritable/overactive bladder
- An increased frequency in the need to urinate
- Waking up several times during the night to urinate (nocturia).

Symptoms related to vaginal atrophy are:

- A reduction in the fullness of the vulva and the vagina
- Dryness, itching and burning in the vagina or on the vulva
- Pain during sexual intercourse
- Vaginal bleeding
- An increase in urinary tract infections due to a change in the acidity of the vagina.

Urinary symptoms of pelvic organ prolapse are urge incontinence and painful urination.

TREATMENTS FOR MENOPAUSAL URINARY SYMPTOMS

As lack of estrogen is the primary cause of urogenital atrophy, the treatments for it in postmenopausal women involve hormone therapy (HT). These can help restore the vagina to premenopausal condition and relieve many symptoms of urogenital atrophy.

Systemic HT may reduce the urinary symptoms of urgency, frequency, nocturia and painful urination, but there is continuing debate about the effectiveness of systemic HT in treating urogenital atrophy.

Local estrogen, applied externally, is helpful in relieving the symptoms of urinary urgency, frequency and stress incontinence, and can also help prevent urogenital atrophy and the recurrence of urinary tract infections.

The most common treatment for vaginal atrophy symptoms is

- Low-dose vaginal estrogen replacement,
- Utilizing creams,
- Tablets
- Vaginal rings.

However, some women are not able to have HT for any menopausal urinary symptoms such as women with breast cancer. For symptoms of vaginal atrophy, they can use vaginal moisturizers for normal relief and vaginal lubricants to relieve dryness prior to intercourse.

Non-hormonal treatments for bladder control symptoms, including those related to pelvic organ prolapse and weakening of the pelvic floor muscles, can involve lifestyle changes and medical procedures.

These include:

- Reducing caffeine
- Bladder-training techniques
- Maintaining a healthy weight
- Avoiding stress to the pelvic area and doing Kegel exercises
- Electrical stimulation of the bladder muscles
- A pessary Ring
- A device placed in the urethra that blocks leakage

ANTICHOLINERGICS

Anticholinergic drugs block the action of the chemical messenger acetylcholine. Acetylcholine sends signals to your brain that trigger bladder contractions associated with an overactive bladder. These bladder contractions can cause a need to urinate even when the bladder isn't full.

Anticholinergic medications include:

- Oxybutynin
- Tolterodine
- Darifenacin
- Solifenacin
- Trospium
- Fesoterodine

Side effects

The most common side effects of anticholinergics are dry mouth and constipation. An extended-release form taken once a day might cause fewer side effects.

• Mirabegron

Mirabegron is a medication approved to treat urinary incontinence. It relaxes the bladder muscle and can increase how much urine the bladder can hold

Side effects

Some common side effects of mirabegron include nausea, diarrhea, constipation, dizziness and headache. It can increase blood pressure. Your blood pressure should be monitored while on this drug. Mirabegron can interact with other medications.

• Onabotulinumtoxin type A (Botox)

Injections of Botox into the bladder muscle might benefit people who have an

overactive bladder or urge incontinence. Botox blocks the actions of acetylcholine and paralyzes the bladder muscle.Botox might be helpful for people who haven't responded to other medications. Benefits can last several months..

- **Estrogen**

Low-dose topical estrogen in the form of a vaginal cream, ring or patch. The estrogen may help restore the tissues in the vagina and urinary tract to relieve some symptoms. Topical estrogen might not be safe for people with a history of breast cancer, uterine cancer or both.

Combination hormone therapy isn't the same as topical estrogen and is no longer used to treat urinary incontinence. Oral estrogen therapy might make incontinence symptoms worse.

- **Imipramine**

Imipramine (Tofranil) is a tricyclic antidepressant. It makes the bladder muscle relax, while causing the smooth muscles at the bladder neck to contract. It may be used to treat mixed incontinence, which is a combination of urge and stress incontinence.

- **Duloxetine**

Duloxetine is a serotonin and norepinephrine reuptake inhibitor that is approved to treat depression and anxiety. It can help relax the muscles that control urination and improve bladder leaks in some people. It might be especially helpful for people who have urinary incontinence and depression.

- **Mirabegron**

Surgery procedures

- **sling procedure**

Synthetic material (mesh) or strips of body tissues are used to create pelvic sling underneath your urethra and the area of thickened muscle where the balder connects to the urethra. The sling helps keep the urethra closed, especially when one coughs or sneeze.

- **TVTO**
- **SSF**
- **Bladder neck suspension**

This procedure is designed to provide support to urethra and bladder neck – an area of thickened muscles where the bladder connects to the urethra.

- **Prolapse surgery.(PFR-Cystocele & Rectocele repair)**

- **Artificial urinary sphincter**

A small, fluid filled ring is implanted around bladder neck to keep the urinary sphincter shut until there is a need to urinate. To urinate, one has to press a valve implanted under your skin that causes the ring to deflate and allow urine to pass.

Conculsion

- **Osteoporosis** is a common disorder In post-menopausal women. Management of skeletal health in post-menopausal women involves assessing risk factor for fracture, reducing modifiable risk factors through dietary and lifestyle changes, and the use of pharmacologic therapy for patients at significant risk of osteoporosis or fracture. For women with osteoporosis, lifelong management is necessary.

- **Bladder symptoms** where associated with reproductive stage. Women in late reproductive stage where more likely to experience nocturia and incontinence than those in menopause transition. The higher rates of nocturia and incontinence in late reproductive stage are intriguing. Further study should include analysis of pelvic organ prolapse degree and other structural differences

MENOPAUSE

MIND OVER MATTER

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Menopause is not a gender or age issue. Awareness on this topic is fundamental and reducing the stigma attached to it, is vital so that more people will talk openly about it, so it can begin to be normalized and people can get the support they need. This year the theme for world menopause day 2022 is "cognition and mood"

The view that menopause as a deleterious effect on mental health is not supported in the psychiatric literature or in general surveys. The concept of specific menopause induced psychiatric illness (involutional melancholia) has been abandoned. Many of the problems reported at the menopause are due to life events.

PSYCHOLOGICAL/NEUROLOGICAL EFFECTS OF HORMONES ON THE MIDLIFE

85% of women experience the perimenopusal transition without mood difficulties. Some women are at greater risk of new onset depressive symptoms, and this is probably enhanced by hormonal variations and vasomotor symptoms. These vulnerable women are likely derived from a group of premenopausal women with underlying psychological problems. It is also possible that perimenopausal hormone changes create a state that makes an individual less able to deal with adverse events in life.

Studies show the common cause of perimenopausal mood problems is already existing depression. The constant changes of hormone levels during this time can have troubling effects on emotion, leaving some women to feel irritable. The hormones estrogen and progesterone not only drive our reproductive system but also there are receptors for them thoughout our body . When these hormones decline, every system

that has these hormone receptors including brain registers the change . These change in brain effects the production of mood regulating chemicals like serotonin and endorphins . Then results are mood swings , depressions, emotion of highs and lows and temper tantrums . When these changes are small we don't notice any effects but when its more dramatic the entire range of unexpected behaviour settles.

Evidence for beneficial effects of estrogen on cognition can be found in the literature especially in verbal memory. Up to three times as many women as men develop Alzheimer disease. Estrogen is capable of protecting central nervous system function by means of multiple mechanisms. For example estrogen protect against neuronal cytotoxicity induced by oxidation, reduces the serum concentration of amyloid P component (the glycoprotein found in Alzheimer's neurofibrillary tangle) and increases synapses and neuronal growth,especially dendritic spine density . Estrogen protects against the cerebrovascular toxicity exerted by amyloid peptides and promotes synaptic formation and neuronal growth and survival progestational agents do not exert similar actions.

HOW TO COPE UP WITH SYMPTOMS?

Menopausal transition period lasts few months to years. Irregular bleeding , hot flushes , urinary problems, memory problems and sexual problems are the major symptoms of this transitions. Certain changes in our day to day practice like period panties (which will take care of unexpected bleeding), customized clothing to overcome hot flushes and Menopausal Hormone Treatment will change our life. Eating more healthy , getting exercise, quitting smoking and alcohol will have positive effects on the menopausal symptoms .Celebrate with partner, try planning holidays,new hobbies and skills, get togethers, the list is endless. When you are too anxious, practice relaxing yogas. Insomnia is a frequent symptom and getting a good sleep is a major life changing action .

EMPTY NEST SYNDROME AND ITS IMPACTS ON MIDLIFE

We usually hear empty nest syndrome , depression and other psychological problems related to menopause. These are mere perceptions of mind than clinical disorders.

The empty nest syndrome usually coincides with major life events like menopause, illness, or retirement. Think through the eyes of youngs ,they are enjoying the freedom, which we did years ago. It's normal to worry about, but not interfere with them. Offsprings should be given space to grow up and flourish. The parent can continue to be close to their children's environment through regular calls, mails, texts or even video chats.

MIND OVER MATTER

Mind over matter not just a catch-phrase but a state of being created by creative visualization and relaxation sessions designed for women who are enduring menopause. "Midlife- a new beginning ", address it that way than "menopause –a new beginning". Just ending your monthly periods and potential to reproduce , doesn't mean it is the end of your happy days. We should take it as dare to dream and make it happen days of our life. As it is a whole new beginning of exciting phase of life , you might actually look forward it. Menopause is an inevitable step in a women's journey , let's climb the stairs without anger , fear and resentment, but with exciting colors.

Give self care and self love. Let's fly the menopausal years with mind as the wngs and

not the physical body. The power of mind over the matter of menopausal symptom is real and studies show how meditation can significantly reduce hot flushes and night sweats. By focusing on what is happening inside , emotionally and mentally, we become aware of the differences between thoughts , feeling and sensation .

EXERCISE YOUR MIND

Imagine yourself sitting at the edge of an ocean.

- Feel the breeze on your face, the mist on your skin
- Hear the sounds of water as the tide comes in and out
- Smell the salty air , and taste the drops of salt water that touch your mouth as the waves approach
- As you splash the water on your arms and your face ,you feel relieved and healed.
- Focus on a calming phrase such as " I am in control, my body is my ally, I am connected to my body and I feel coolness with in " repeat it mentally.

CONCLUSION

Look forward our future, no more periods to worry about, no more fear of unplanned pregnancy. It's time to celebrate that special milestone fulfilling our bucket list , which was submerged under the womanhood. Memory and other cognitive issues may improve with time. Eat well, sleep good, exercise and keep your mind active. If your brain fog get worse make an appointment with the doctor.

References:

- *Speroff's clinical gynaecologic endocrinology and infertility 8th edition*
- *https://www.webmd.com/menopause/features/your-brain-on-menopause*
- *https://www.healthline.com/health/menopause/menopause-brain-fog*
- *https://clinmedjournals.org/articles/jfmdp/journal-of-family-medicine-and-disease-prevention-jfmdp-3-064.php*

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