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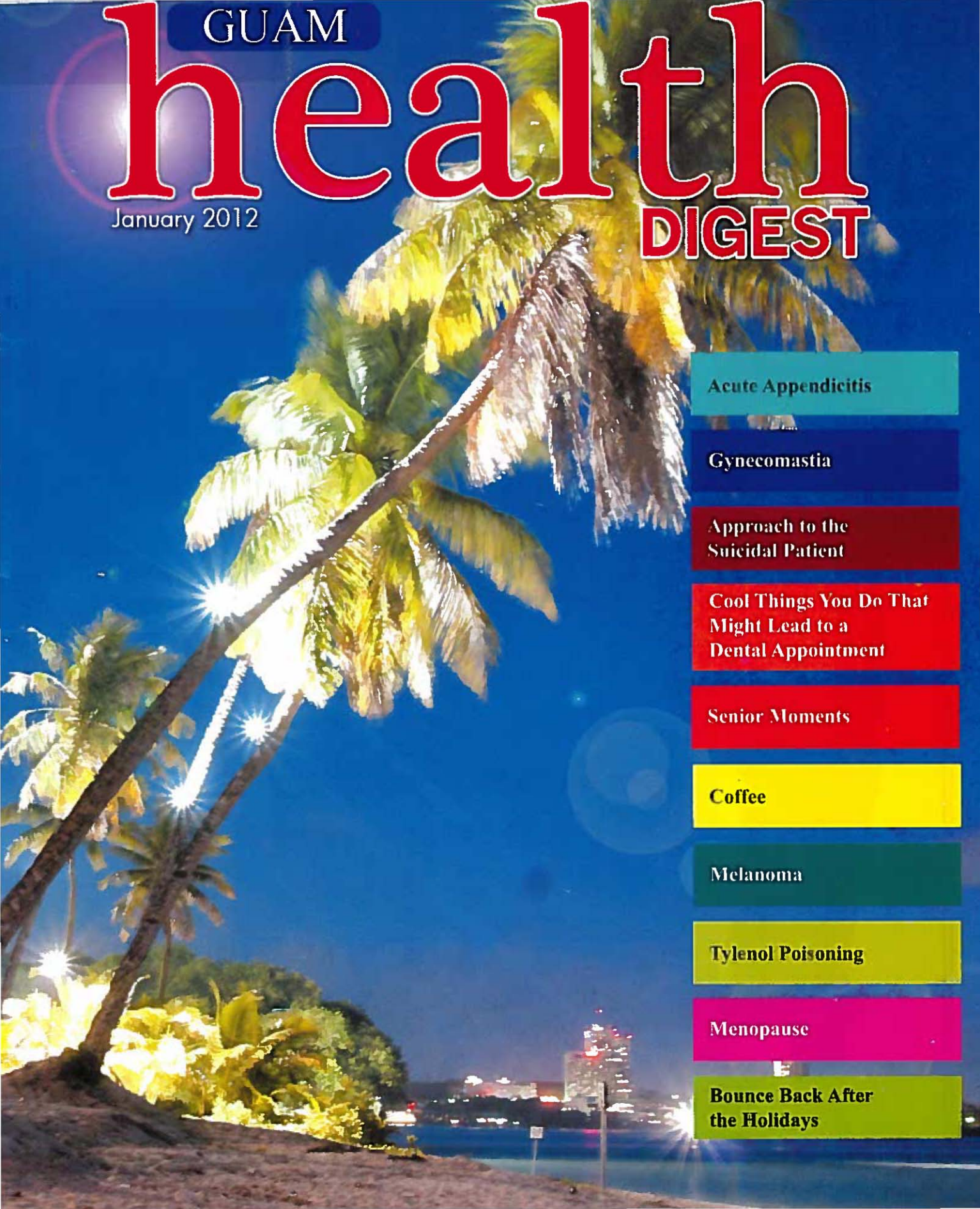
January 2012



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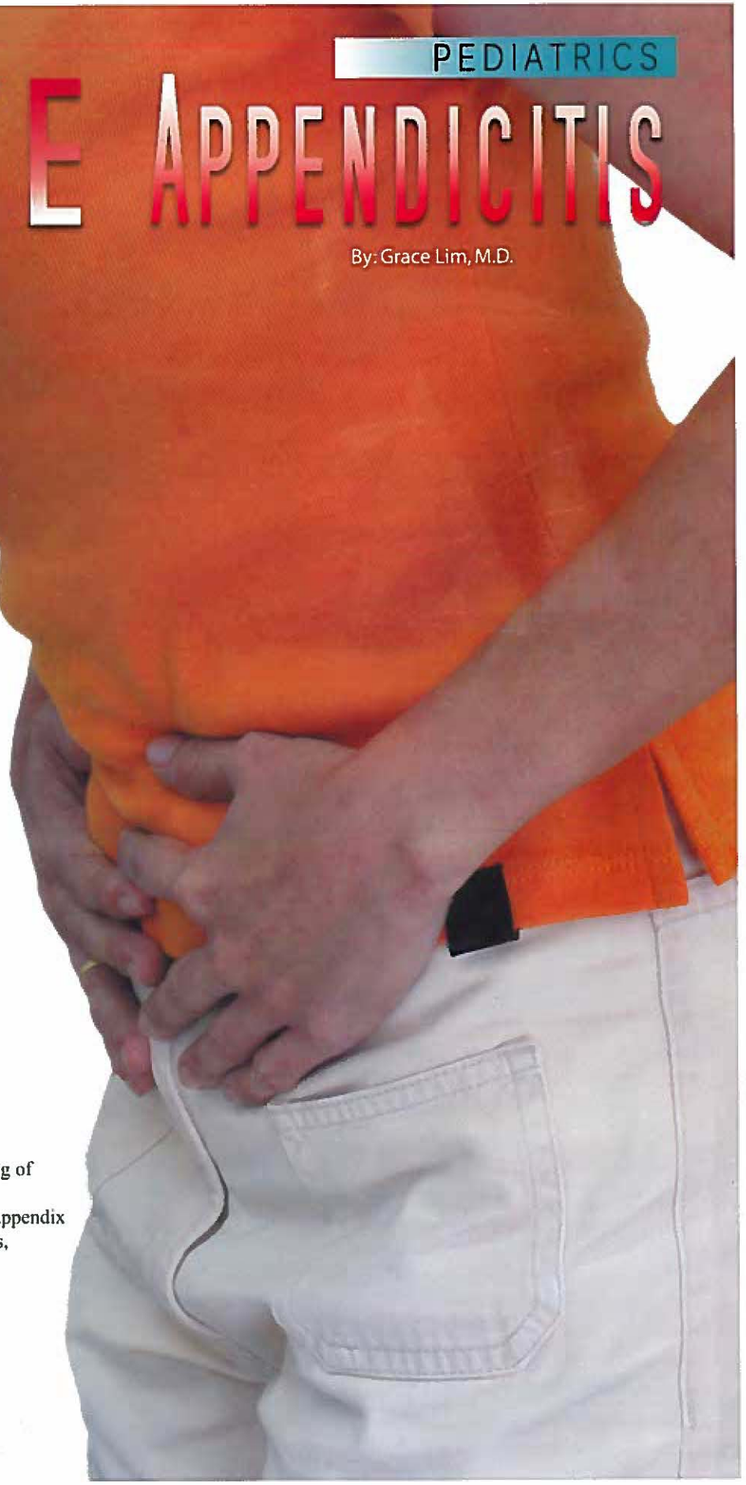
PEDIATRICS

ACUTE APPENDICITIS

By: Grace Lim, M.D.



OVERVIEW

- A surgical emergency due to inflammation of the appendix
- Presents with abdominal pain, initially around the umbilicus and above, gradually localizing to the right lower quadrant of the abdomen, followed by anorexia, nausea and fever
- Most common surgical emergency
- 75 cases per 100,000 population per year
- 1 in every 2000 pregnancies
- Highest occurrence in teenagers 10-19 years of age
- More serious in infants and elderly due to perforation of the appendix

RISK FACTORS

- Family history of appendicitis
- Low-fiber diet
- Reduced fluid intake
- Parasitic worms closing up the opening of the appendix
- Small hard stools causing obstruction to opening of the appendix
- Tumors and enlarged lymph nodes around the appendix
- Chronic infection of appendix with tuberculosis, amebiasis, or actinomycosis

SIGNS & SYMPTOMS

- Abdominal pain
- Nausea
- Vomiting
- Fever
- Increased heart rate
- Tenderness of abdomen to touch especially at right lower quadrant of abdomen
- Increased pain when examining hand is suddenly released from pressure on abdomen
- Increased abdominal pain when right thigh is extended
- Increased abdominal pain when the right flexed hip is rotated internally
- Abdominal distention
- Abdominal mass may be felt at times
- Increased white blood cells and polymorphonuclears in blood

DIAGNOSTIC APPROACH

- Complete history and physical examination
- Complete blood count
- Blood chemistries
- Urinalysis to rule out urinary infection
- Imaging with CT is diagnostic test of choice
- Abdominal ultrasound is most useful in women to rule out ovarian cysts, ectopic pregnancy, tubal and ovarian abscesses
- Laparoscopy is used when diagnosis is uncertain after noninvasive tests

TREATMENT

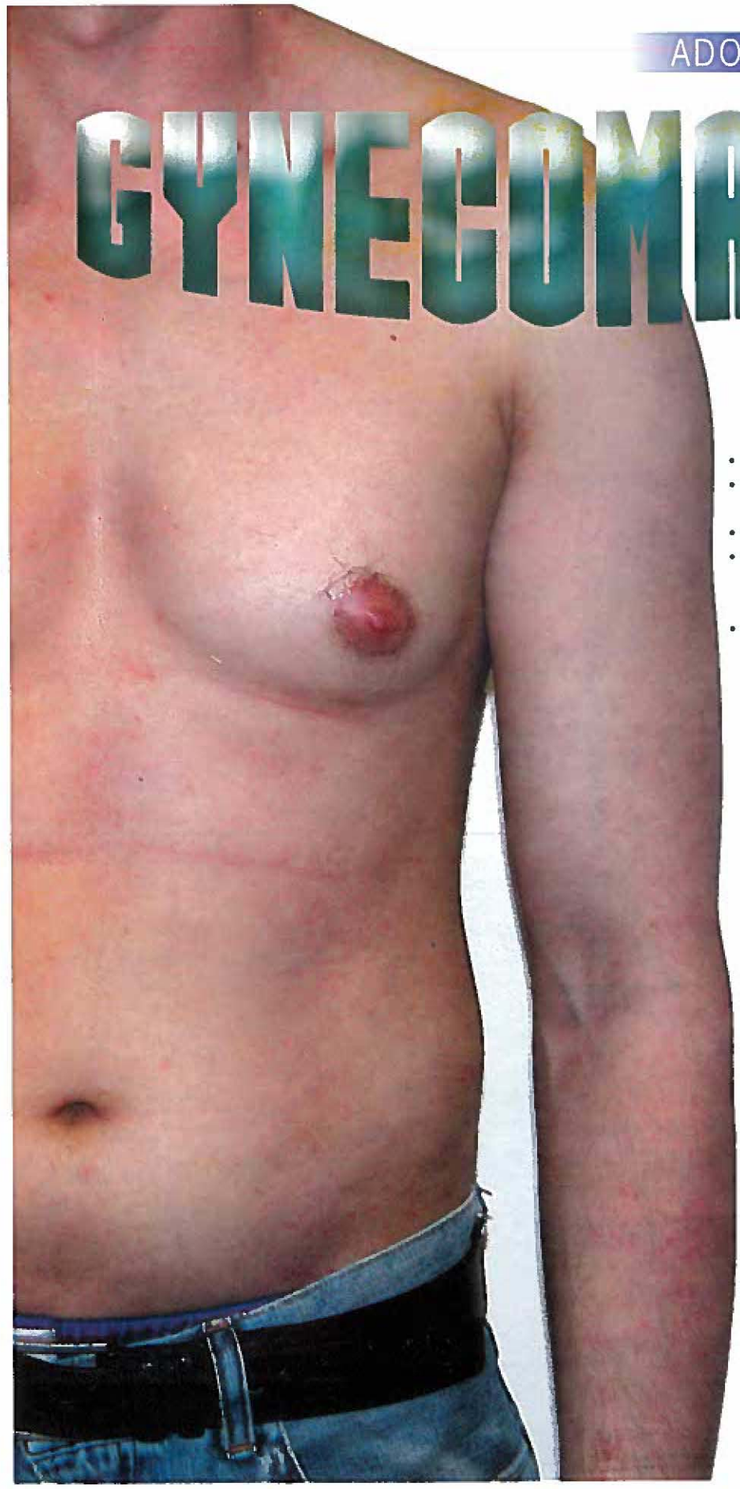
- Strong analgesics including opiate drugs to relieve pain
- Appendectomy should be performed as soon as patient is stabilized
- Intravenous fluids to improve hydration
- Correct any electrolyte imbalance
- Antibiotic therapy is initiated to prevent complications

COMPLICATIONS

- Perforation of appendix
- Peritonitis
- Abscess formation
- Gangrene formation
- Septic thrombophlebitis of the portal venous system
- Recurrent acute appendicitis
- Wound infection
- Non-closure of surgical wound

PROGNOSIS

- With early diagnosis, most cases are treated successfully.
- Perforation and mortality rates are higher in infants and elderly persons
- Unperforated appendix mortality rate is < 0.1%
- Perforated appendix mortality rate is 3%
- In pregnancy highest mortality rate is in last trimester



ADOLESCENT MEDICINE

GYNECOMASTIA

By: Johnny Fong, M.D.

OVERVIEW

- Benign enlargement of the male breast
- Enlargement of the glands of breast tissue to around 4 cm in diameter
- Usually painful to touch
- Occurs in infancy at 3 weeks of age, in puberty at 10 to 12 years of age, and in late adult life at age 50-80 years
- Occurs when estrogen-to-androgen ratio is increased
  - ✓ Infancy: due to maternal or placental estrogens
  - ✓ Puberty: due to temporary increase in estradiol levels disproportionate to the increase in androgen levels
  - ✓ Late adulthood: due to decrease in testoster one and increase in fat tissue

RISK FACTORS

- Increasing age
- High body mass index
- Excess weight gain
- Medications high in estrogen
- Androgen deprivation therapy for treatment of prostate cancer
- Anabolic steroid use
- Marijuana smoking
- Herbal products

SIGNS & SYMPTOMS

- Enlargement of breast tissue on one or both breasts > 4 cm in diameter
- Nipple or breast pain
- Assymmetric size of the breasts
- Tenderness or pain to touch
- Nipple discharge

DIAGNOSIS

- Complete history and physical examination
- Detailed breast examination
- Check for secondary sex characteristics
- Check for testicular size
- Check for testicular masses or tumors
- Complete blood examination
- Blood chemistries
- Liver function test
- Thyroid function test
- Testosterone level
- 17β-estradiol level
- Luteinizing hormone level
- β-hCG level
- Chromosomal examination
- Mammography or ultrasonography
- Testicular ultrasonography
- CT or MRI of the breast
- Breast biopsy to rule out breast cancer

TREATMENT

- Observation is the preferred treatment for pubertal cases, because 90% improve within 3 years
- Identify and treat the underlying cause
- Discontinue use of offending medications.
- Medical therapy can be used when gynecomastia is associated with severe pain
- Surgery is indicated for severe psychological and cosmetic problems, continued growth or tenderness, suspected cancer
- Observation and monitoring in mild cases with follow-up examinations
- Anti-estrogen drugs like Tamoxifen
- Androgen medications
- Aromatase inhibitors like testolactone or anastrazole
- Surgical removal for continued growth and poor response to medical therapy
- Low-dose irradiation prevents gynecomastia and reduces severity of breast pain in men receiving androgen deprivation therapy for prostate cancer

COMPLICATIONS

- Breast cancer
- Psychological problems
- Cosmetic problems due to breast enlargement

PROGNOSIS

- If the primary cause is corrected, gynecomastia subsides after several months.
- Gynecomastia due to medications resolves after the offending drug is discontinued.

PREVENTION

- Avoid androgen and anabolic steroid abuse
- Prophylactic antiestrogen therapy or irradiation for men receiving androgen deprivation therapy for prostatic cancer

MENTAL HEALTH

Approach to the Suicidal Patient

By: Gerard Fernandez, M.D.

OVERVIEW

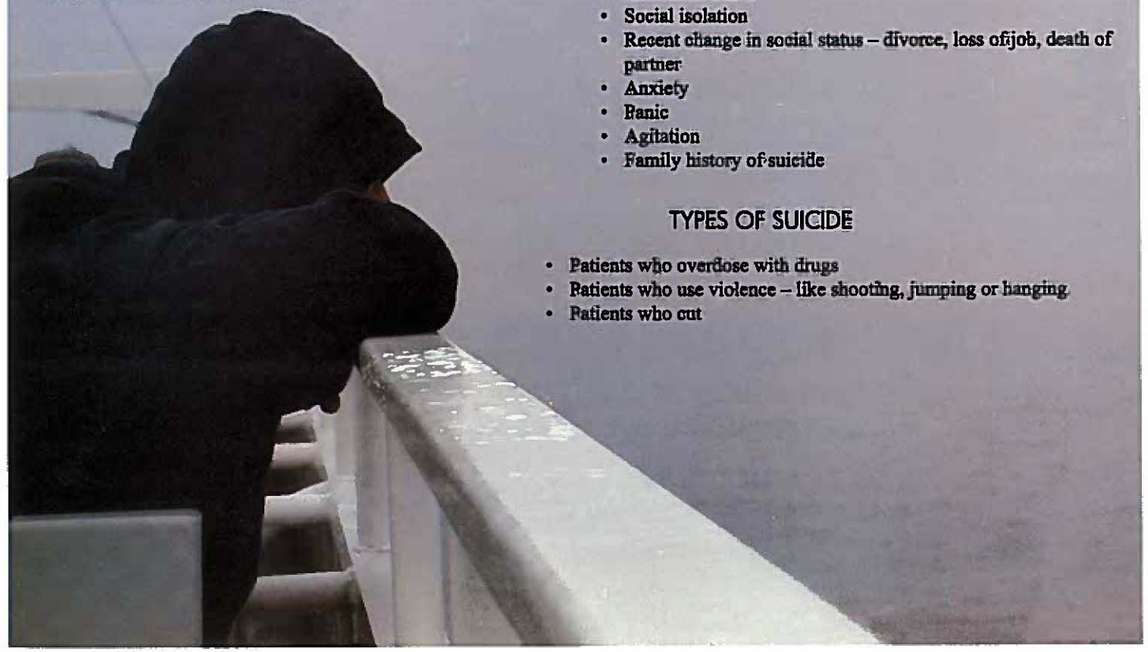
- A suicidal patient is one who harms himself in order to terminate his life.
- Suicide is a major cause of death worldwide.
- One percent of all deaths in the U.S. is due to suicide.
- Two percent of the general population have considered suicide at one point or another.
- Four percent of patients with depression commit suicide.
- Ten percent of schizophrenic patients commit suicide.
- Women are more likely to ATTEMPT suicide, usually by drug overdose.
- Men are more likely to COMPLETE suicide, usually by hanging or shooting himself.
- Elderly patients are more likely to COMPLETE suicide.
- Patients who COMPLETE suicide are usually male, older, living alone and physically ill.
- There are 40 ATTEMPTED suicides for every 1 COMPLETED suicide in the general population.
- There are 200 ATTEMPTED suicides for every 1 COMPLETED suicide in adolescents.
- There are 4 ATTEMPTED suicides for every 1 COMPLETED suicide among the elderly.
- Not all patients who harm themselves wish to die. Others do it to express distress, desperation, to escape from troubling situations, to relieve tension, to attract attention, and to cry for help

RISK FACTORS FOR SUICIDE

- Patient has a definite plan for the suicide established
- Older patient
- Physically ill
- Access to firearms, knives or other deadly instruments
- Male sex
- Women who suffered physical or sexual abuse or violence
- History of suicide attempts
- Profound hopelessness
- Depression
- Chronic pain
- Substance abuse
- Social isolation
- Recent change in social status – divorce, loss of job, death of partner
- Anxiety
- Panic
- Agitation
- Family history of suicide

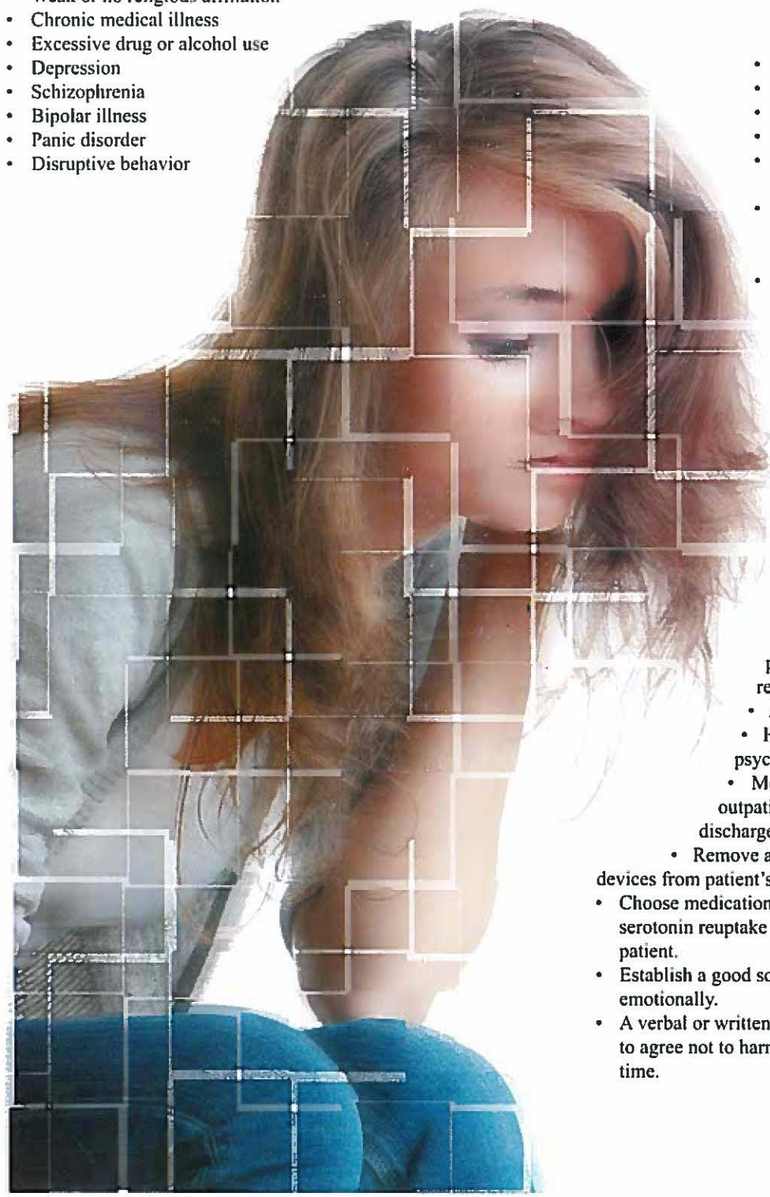
TYPES OF SUICIDE

- Patients who overdose with drugs
- Patients who use violence – like shooting, jumping or hanging
- Patients who cut



SIGNS & SYMPTOMS OF HIGH RISK SUICIDE PATIENT

- Male
- Separated, divorced, or widowed
- Family history of suicide
- Troubled family situation
- Unemployed
- Recent relationship conflict or loss
- In disciplinary trouble at school or work
- Weak or no religious affiliation
- Chronic medical illness
- Excessive drug or alcohol use
- Depression
- Schizophrenia
- Bipolar illness
- Panic disorder
- Disruptive behavior
- Feelings of helplessness or hopelessness
- Intense suicidal thoughts
- Repeated suicide attempts
- Patient has realistic suicidal plan
- Patient has feelings of guilt about suicide thoughts
- Patient has continuing wish to die
- Lack of concern
- Unsupportive family
- Socially isolated
- Uncommunicative



DIAGNOSIS

- Complete history and physical examination
- Interview patient's family members
- Complete blood count
- Blood chemistry panel
- Thyroid function test to rule out other medical illnesses
- Urine and serum toxicology screens may be indicated in patients with drug overdose or ingestion attempt.
- Psychiatric physical examination and evaluation.

TREATMENT

- Relatives and hospital staff should show concern and empathy. Never show contempt for patient's actions because this will intensify patient's low self-esteem.
- Remove all dangerous objects from patient and treatment room.
- Provide staff to supervise patient. Never leave patient alone.
- Evaluate patient to determine whether patient is high risk or low risk patient to repeat suicide attempt.
- Address all medical and psychiatric issues.
- High risk patients should be referred to psychiatrist right away.
- Medium to low risk patients should have outpatient treatment plan implemented before discharge from hospital.
- Remove all drugs, firearms, knives and other suicide devices from patient's environment.
- Choose medication with low overdose potential – selective serotonin reuptake inhibitors (SSRI) are least dangerous to patient.
- Establish a good social support system to help the patient emotionally.
- A verbal or written agreement should be elicited from patient to agree not to harm or kill himself for a particular period of time.

COMPLICATIONS

- Patients may complete the suicide
- Morbidity related to suicide attempt
- Social stigma of suicide attempt
- Family members, co-workers, or schoolmates of someone who has attempted suicide are themselves at an increased risk for suicide.

PROGNOSIS

- Risk of suicide after deliberate self-harm varies between 0.24% and 4.3.
- More than 5 % of patients will commit suicide again within 9 years.

PREVENTION

- Education of physicians and caregivers in depression recognition and treatment
- Limit patient access to suicidal materials like drugs, weapons, knives, guns.
- Public education on suicide
- Screening programs for adolescents and other high risk patients
- Dissemination of media education on suicide
- Aggressive treatment of depression in elderly
- Family and social support

MONITORING

- Ongoing support and monitoring are mandatory
- Discharged patients should have a safety plan in place.
- Monitor patient for mood changes, social and work situations
- Monitor patients for drug or alcohol abuse
- Monitor patients for access to drugs, knives, guns and other weapons

DENTAL HYGIENE

Cool Things you do that might lead to a DENTAL APPOINTMENT

By: Jacqueline Ann Fong, A.S.D.N., B.A. Journalism

You might think that these things you do are COOL. In reality, they cause tooth decay, cavities, loss of enamel, tooth color changes, tooth fractures, gingivitis, mouth infections and even choking on chipped teeth.

- Lip and tongue piercing
- Drinking soft drinks in excess
- Chewing on ice
- Drinking sports drinks in excess
- Drinking energy drinks in excess
- Playing sports with no mouth guard
- Eating gummy candy
- Eating cough drops
- Grinding teeth
- Bedtime glass of milk
- Drinking sugared fruit juices
- Snacking on potato chips
- Opening bottles with your teeth
- Constant snacking
- Chewing on pencils
- Drinking coffee in excess
- Smoking
- Drinking red wine in excess
- Drinking white wine in excess
- Binge eating

ADULT MEDICINE

Senior Moments

By: Jacqueline Fong,
ASDN, B.S. Journalism

A lot of seniors get concerned when they start forgetting names of friends and relatives, phone numbers and at times their own age. They rush into a room with a purpose, only to forget what they went in there for. They forget appointments, their kids' birthdays, and even where they parked their cars.

This transient loss of memory or mental function is called a Senior Moment. It is part of aging. Although disturbing and even frightening, this phenomenon does not usually lead to something more serious than a momentary malfunction.

Most of the time, senior moments occur because of stress related to doing too many things at the same time. They could also be due to hormonal imbalance, mood changes and aging neurotransmitters in the brain. All seniors go through this phase. Even politicians and presidential candidates have them.

We can reduce their occurrence by doing the following:

1. Try to concentrate on one thing at a time. Do not cling on to your youth and still do multi-tasking. Concentrating on one task at a time improves memory.

2. Exercise daily. Exercise brings oxygen and nutrients to the brain. It keeps the brain and body healthy. It helps to keep us in a good mood, focus properly on tasks at hand, and keep as alert at all times. It also reduces stress and is good for overall body health, weight loss, and helps treat diabetes and hypertension.

3. Learn to use the computer. Using the computer helps minimize senior moments and prevents mild cognitive impairments of the brain.

4. Get a good night's sleep. It is when we are sleeping that memories are consolidated, stored permanently and cemented in our brain. A good night's sleep will help preserve these memories and prevent senior moments.

5. Drink Ginseng tea. Ginseng tea reduces stress, increases mental endurance and promotes clarity of our mind. This leads to a better functioning brain with less senior moments.

6. Eat your anti-oxidants, vitamins and berries. They enhance mental functioning and improve memory.

7. Keep your brain active. Read, write, do cross-word puzzles, Sudoku and other challenging word games. They stimulate the brain to remain clear, sharp and reduce senior moments.

NUTRITION

COFFEE

By: Jacqueline Ann Fong, A.S.D.N., B.A. Journalism

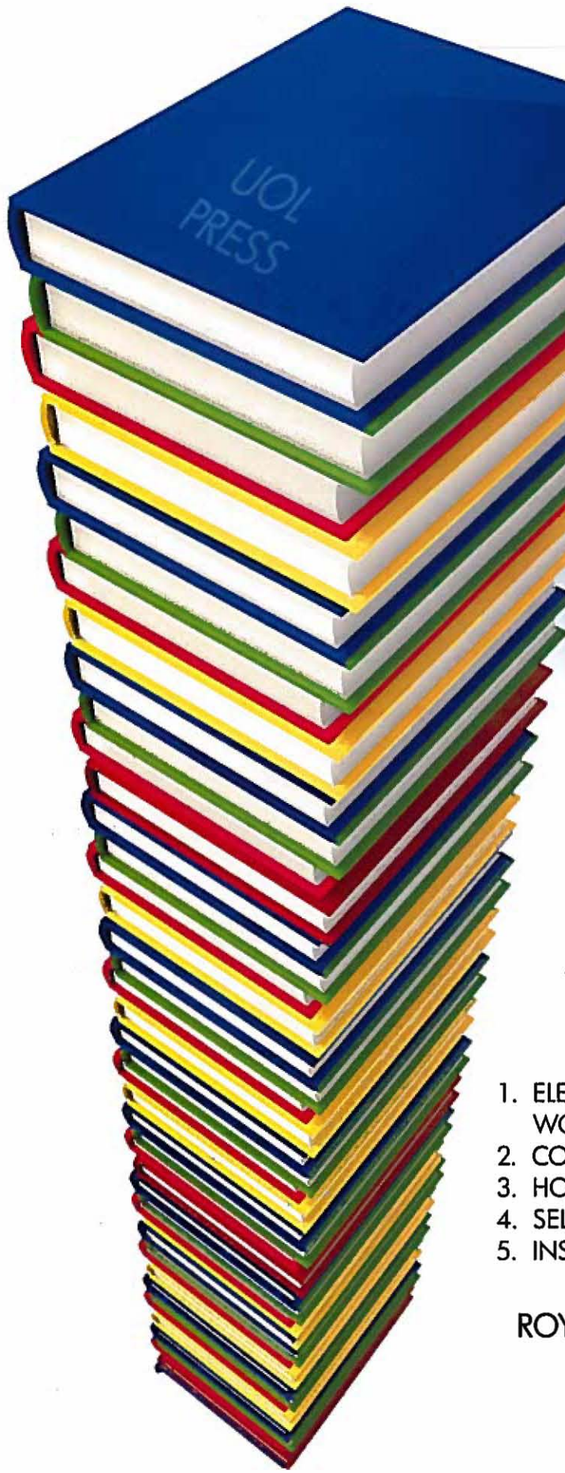
The good and the bad
Drinking 2 cups of coffee a day

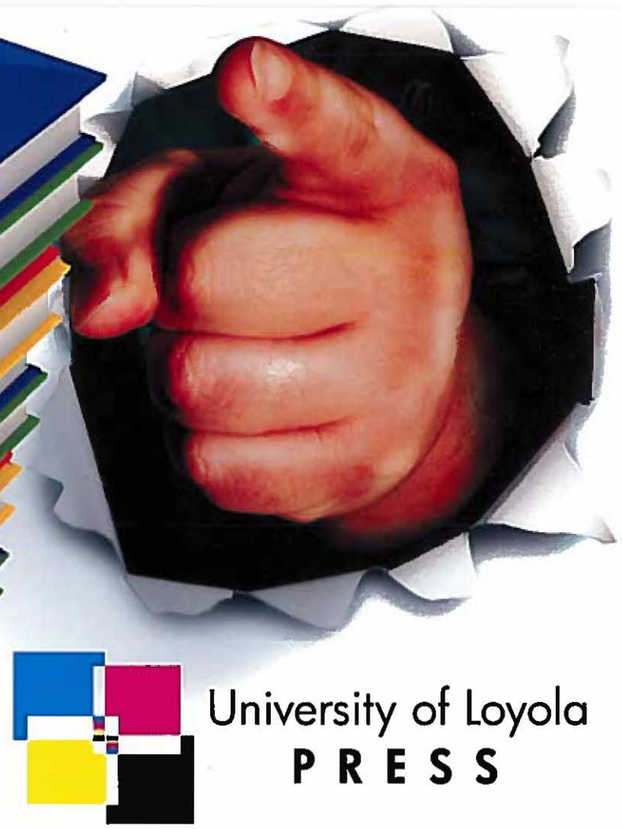
GOOD:

- Prevents dementia
- Prevents alzheimer's disease
- Reduces incidence of glioma, a type of brain tumor
- Lowers risk of diabetes mellitus by increasing cells' sensitivity to insulin
- Lowers stroke rates
- Lowers risk of liver disease
- Lowers risk of liver cirrhosis
- Lowers risk of liver cancer
- Has anti-oxidants
- Decreases heart rhythm disturbances
- Decreased risk of parkinson's disease

BAD:

- Increases risk of heart disease
- Causes irritability
- Causes anxiety
- Causes extreme fatigue
- Causes headaches
- Causes withdrawal symptoms if coffee is withheld
- Causes insomnia
- Increases the level of bad low density cholesterol
- Bad for breast feeding mothers because caffeine goes to breast milk
- Can cause high blood pressure
- Causes heartburn





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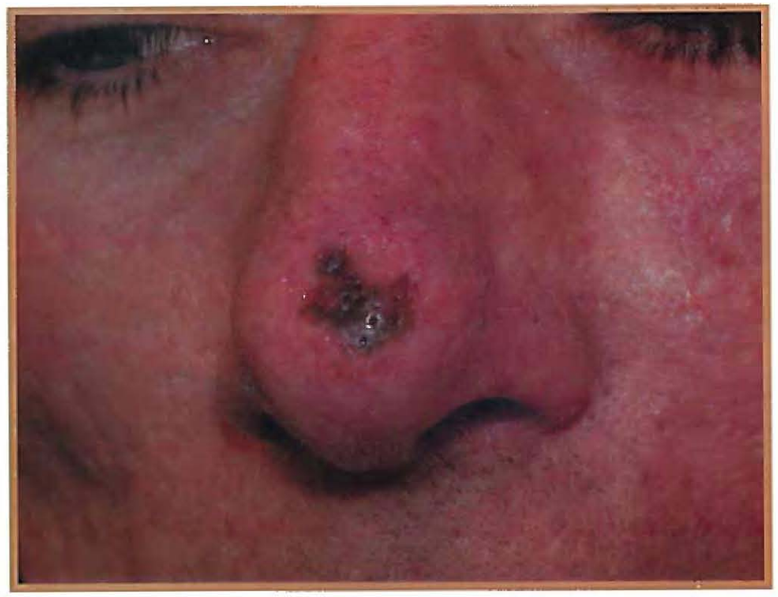
MELANOMA

By: Joseph Breton, M.D.

OVERVIEW

- Skin cancer linked to excess sun exposure
- Pigmented skin lesions with high metastatic potential
- Poor prognosis with metastatic spread
- Occurs in 25 per 100,000 men in U.S.A.
- Occurs in 16 per 100,000 women in U.S.A.
- Fifth most common cancer in men
- Sixth most common cancer in women
- Causes 8420 deaths annually
- Melanoma can metastasize to any organ
- Average age at diagnosis: 40 years
- Incidence increases with age.
- Rare in children under age 10
- More common in people with fair complexion, red or blond hair, blue eyes, freckles
- Less common in black people and dark-skinned people



RISK FACTORS

- History of sunburn especially in childhood
- Increased sun exposure
- Older age
- People with more than 50 nevi that are greater than 2 mm in diameter
- Family history of melanoma
- White ethnicity
- Previous melanoma
- Immunosuppression
- Sun sensitivity or excess exposure to sun

DIAGNOSIS

- Complete history and physical examination
- Distinguish cutaneous melanomas from benign pigmented skin lesions
- Complete examination by dermatologist
- Biopsy of any pigmented cutaneous lesion that has changed in size or shape
- Biopsy of any pigmented skin lesion that has features suggestive of malignant melanoma
- No laboratory tests, X-rays or scans are routinely indicated unless history or physical examination suggests metastasis to a specific organ

SIGNS & SYMPTOMS

- Rapidly growing and changing nevus
- Skin is chronically sun-damaged
- Malaise
- Weight loss
- Headaches
- Visual difficulty
- Bone pain

TREATMENT

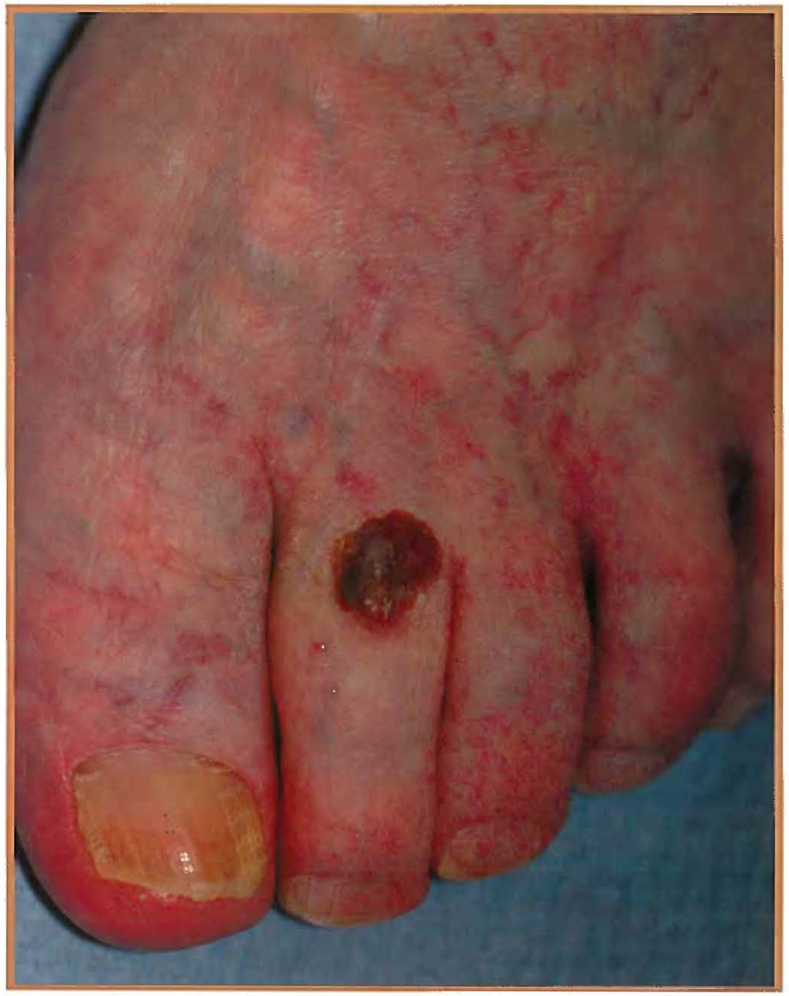
- Early recognition and local surgical excision for localized disease
- Elective lymph node dissection has no proven advantage in overall survival
- Adjuvant interferon (IFN) may improve survival
- No therapy for metastatic disease is curative
- Metastatic disease may be treated with chemotherapy or immunotherapy
- Surgery during radial growth period
- The goal of treatment in patients with distant metastases is usually palliation
- Radiotherapy provides local palliation for recurrent tumors or metastases

COMPLICATIONS

- Metastatic disease to lymph nodes, liver, lung, bone and brain
- Complications of IFN or chemotherapy treatment
- Death

PROGNOSIS

- Most important factor is the stage of the melanoma when diagnosed
- Most melanomas are diagnosed in clinical stages I or II
- Favorable sites are the forearm and leg
- Unfavorable sites are scalp, hands, feet, and mucous membranes
- Patients with soft-tissue and node metastases fare better than those with liver and brain metastases.
- Women with stage I or II disease tend have better survival than men
- Women frequently have melanomas on the lower leg
- Older persons especially men over 60, have poorer prognoses



PREVENTION

- Early detection and prevention by understanding nature of the disease
- Prevention is based on protection from the sun using sunscreens and protective clothing
- Self-examination every month may increase likelihood of detecting malignant changes in a nevus
- Patient's family members should be screened and checked by a dermatologist
- Patient education brochures are available from:
  - ✓ American Cancer Society
  - ✓ American Academy of Dermatology
  - ✓ National Cancer Institute
  - ✓ Skin Cancer Foundation

Tylenol Poisoning

By: Grace Lim, M.D.

OVERVIEW

- Generic name of Tylenol is Acetaminophen
- Commonly used for fever and pain
- Present in many over-the-counter and prescription medications
- Overdose can lead to liver damage and death
- Drug most often seen in fatal poisoning
- Leading cause of acute liver failure in the U.S. and England
- 500 deaths from acetaminophen poisoning each year in U.S.

RISK FACTORS

- Liver damage is worse if Tylenol is combined with alcohol, phenobarbital, isoniazid and herbs
- Liver damage is worse among elder patients and tobacco users
- Risk is higher in suicidal patients
- Risk is higher in psychiatric patients

SIGNS & SYMPTOMS

- Nausea
- Vomiting
- Diarrhea
- Abdominal pain
- Shock
- Liver damage
- Liver failure
- Progressive yellowing of skin
- Blood coagulation disorder
- Mental confusion
- Kidney failure
- Heart muscle damage

DIAGNOSIS

- Complete history and physical examination
- Blood Acetaminophen level is increased
- Blood AST level is increased
- Blood ALT level is increased
- Prothrombin time is increased
- Blood Bilirubin is increased
- Blood ammonia is increased
- Blood glucose is decreased
- Head CT in patients with altered mental status.
- Liver ultrasound

TREATMENT

- Supportive care
- Determine presence of liver damage
- Contact local poison control center
- Gastric lavage if overdose is very recent
- Oral administration of activated charcoal or cholestyramine to prevent absorption of tylenol
- Administration of sulfhydryl compounds like cysteamine, cysteine, or N-acetylcysteine reduces severity of liver damage
- Liver transplantation if signs of liver failure is present

MONITORING

- Serial acetaminophen levels
- Serial liver function tests
- Serial prothrombin times
- Serial ammonia levels
- Serial glucose levels
- Monitor for signs of liver failure and need for liver transplantation

COMPLICATIONS

- Liver failure
- Blood coagulation disorder
- Renal failure
- Cardiac injury
- Hepatic encephalopathy
- Coma
- Multi-organ failure
- Death

PROGNOSIS

- 10–15 grams of Tylenol can produce liver damage
- 25 grams or more of Tylenol can be fatal
- Toxic dose of Tylenol in alcoholics may be as low as 2 grams
- 70% of patients who had emergency liver transplantation are alive after one year
- 20% of patients who had emergency liver transplantation die after one year
- Survivors of Tylenol overdose usually have no evidence of liver damage

PREVENTION

- Keep Tylenol and all medications out of reach of children
- Keep Tylenol and all medications in child-proof containers
- Teach patients the correct dose of Tylenol
- Teach patients the actual amount of Tylenol in their medications
- Remove Tylenol and all medications from reach of suicidal patients

Menopause

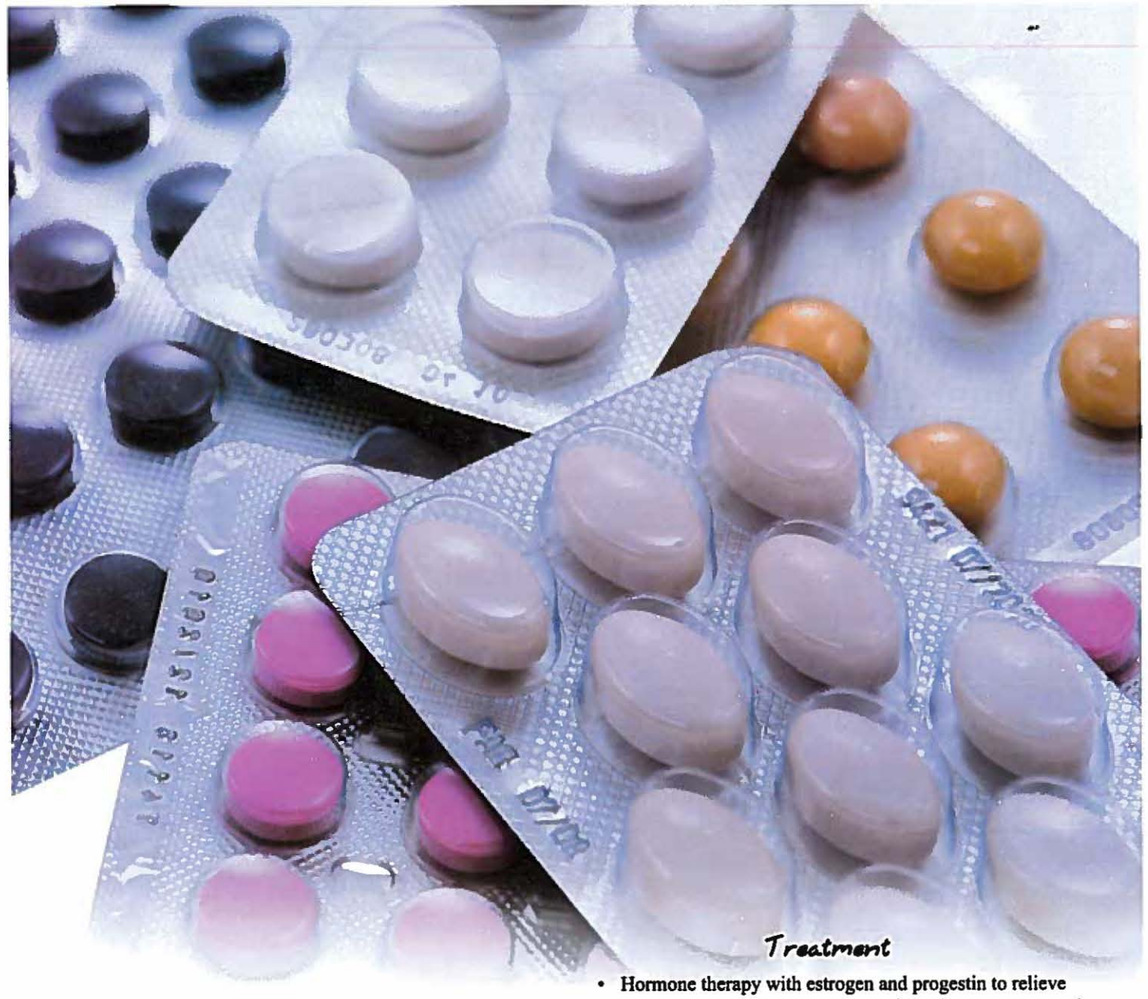
By: Joseph Breton, M.D.

Overview

- Permanent cessation of menstruation due to loss of ovarian function
- Average age at menopause in U.S. women is 51 years
- Menopause is 2 years earlier in smokers
- Natural menopause is due to steady reduction of primary ovarian follicles due to aging
- Menopause can be caused by surgical removal of ovaries
- Menopause can be caused by chemotherapy
- Menopause can be caused by pelvic radiation due to cancer
- Menopause is associated with osteoporosis, cardiovascular disease, premature ovarian failure, loss of libido and atrophic vaginitis

Signs & Symptoms

- Menstrual pattern changes
- Hot flashes
- Night sweats
- Insomnia
- Vaginal dryness
- Mood swings
- Nervousness
- Anxiety
- Irritability
- Depression
- Atrophy of urogenital epithelium and skin
- Absence of menstruation for a year or more
- Thinning and wrinkling of skin
- Hair changes
- Reduction in breast size
- Vaginal dryness
- Vaginal burning or soreness
- Vaginal itching
- Vaginal discharge
- Severe pain during intercourse
- Urinary pain and frequency of urination
- Vaginal bleeding



Diagnosis

- Complete history and physical examination
- Complete gynecological examination
- History of absence of menstruation for 6–12 months
- Irregular menses in a 45 – 55 year old woman
- An elevated serum FSH level and low estradiol level indicates ovarian failure
- Imaging studies are not useful in diagnosing menopause
- Trans-vaginal ultrasonography is indicated in women with abnormal uterine bleeding
- Saline hysterosonography may be useful to detect leiomyomata or endometrial polyps
- Endometrial biopsy to evaluate for endometrial hyperplasia in women with abnormal uterine bleeding

Treatment

- Hormone therapy with estrogen and progestin to relieve vasomotor symptoms, prevent genito-urinary symptoms, bone loss and vertebral fracture
- Long term use of hormone therapy is not indicated
- Hormone therapy is not recommended for women with history of stroke, breast and endometrial cancer, cardiovascular disease and thromboembolism
- Stop smoking
- Daily exercise
- Healthy diet
- Maintain normal body weight
- Adequate calcium intake

Monitoring

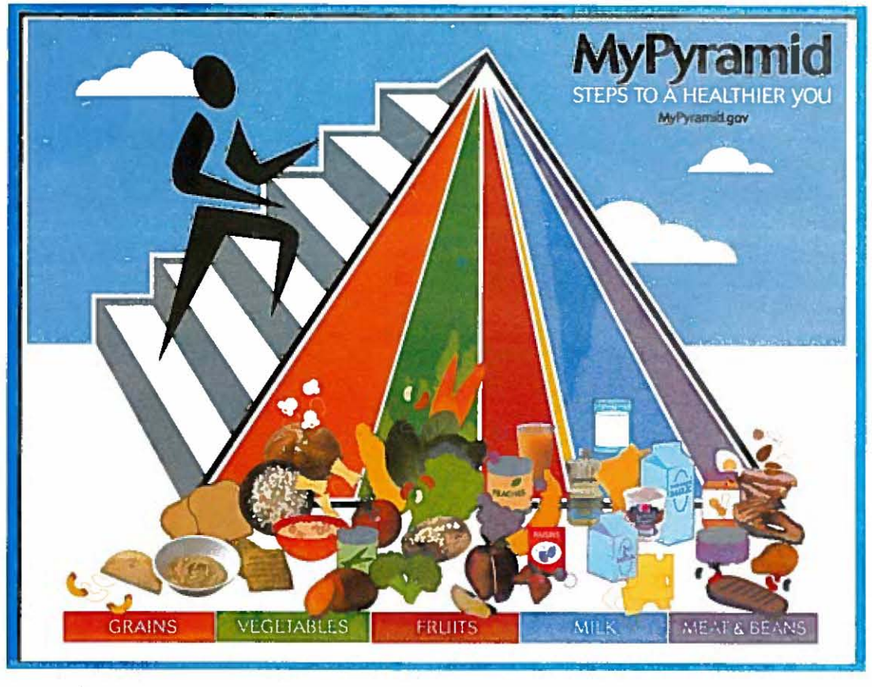
- Annual primary care physician check-up
- Annual pap smear
- Annual pelvic and breast examination
- Regular mammography as recommended by physician
- Regular follow-up for all patients using hormone therapy to monitor for bleeding during therapy

Bounce back after the holidays

By: Michael Koning, M.D.

From Thanksgiving to New Year's Day, we tend to eat a bit more than usual. If you ask people in January, they will often say they are up 5 pounds or more. According to the New York Times, average weight gain over the holidays is just one pound. That's the good news. The bad news is that most people never lose that pound of holiday excess. According to the New England Journal of Medicine, the average weight gain during adulthood is 1-2 pounds per year. So the conclusion is that holiday eating accounts for half or more of average weight gain for US adults. For those who are already overweight, the holiday weight gain is worse – overweight people gained 5 pounds or more during the holidays. The effects of holiday eating start early

Let's look at a minor goal: losing that one pound of weight gain. It should be easy. One pound of fat represents 3500 calories. To lose that pound means that we need to burn a few more calories and/or consume a few less calories. The easiest is a combination of the two. It is good to look at your average consumption of food and consider the calories, and more importantly, the sources of calories in your diet. Most people follow an American style diet, where a substantial portion of the caloric intake is from fat.



The Food Pyramid

The USDA's daily dietary recommendations for people age two and up:

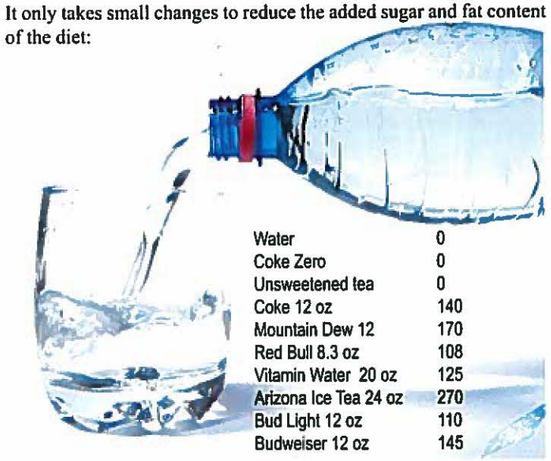
Grains: 6-11 servings
Vegetables: 3-5 servings
Fruit: 2-4 servings
Dairy: 2-3 servings
Meats: 5-7 meat oz.
Discretionary fat: use sparingly
Added sugars: use sparingly

The average person eats…

Grains: 6.8 servings
Vegetables: 3.0 servings
Fruit: 1.6 servings
Dairy: 1.7 servings
Meats: 5.3 meat oz.
Discretionary fat: 62.1 grams
Added sugars: 22.9 teaspoons

As you can see from the chart, the average US person consumes 62.1 grams of fat per day together with 22.9 teaspoons of added sugars. A gram of "discretionary" fat is 9 calories, so 62.1 grams is 558.9 calories. A teaspoon of sugar is 4 grams, which contains 16 calories of 100 % high glycemic carbohydrate – that adds up to 366.4 calories of added sugars. The total discretionary fat and added sugar is 925.3 calories – without touching the high nutritional value part of your diet.

It only takes small changes to reduce the added sugar and fat content of the diet:



Water	0
Coke Zero	0
Unsweetened tea	0
Coke 12 oz	140
Mountain Dew 12	170
Red Bull 8.3 oz	108
Vitamin Water 20 oz	125
Arizona Ice Tea 24 oz	270
Bud Light 12 oz	110
Budweiser 12 oz	145

Do you drink sodas, vitamin water or beer? It is easy to reduce consumption of these and a reduction of only three beers per week will take that holiday pound off in 5 weeks. If you drink a vitamin water in the morning and a coke at lunch, and follow that with a couple of Budweisers at dinner – switching to water or diet soda and limiting yourself to one Budweiser at dinner would yield a net calorie reduction of 510 calories per day. That's enough to reduce weight by 1 pound per week without even changing your diet!

The reduction or elimination of drinks with added sugar will pay off in reduced weight gain, better glucose control for diabetics, fewer dental cavities – and you will feel better without rebound hypoglycemia.

Let's take a look at the fat content of our diets. Eating fatty foods in excess is one of the main culprits in developing heart disease, diabetes, and obesity. In the US 76% of all meals ordered out were from fast food restaruants. Many of these serve high fat containing meals, but most have lower fat options to choose from as in the table below:

		Calories	fat g	fat cal
McDonald's	Big Mac	560	30	270
	Q pounder	420	18	162
	Grilled chicken	420	9	81
	Med fries	380	20	180
	Large fries	570	30	270
	Saus Egg McMuffin	450	27	243
	GrilledChicken salad	290	10	90
	Newmans dressing	120	9	81

		Calories	fat g	fat cal
Kentucky Fried Chicken				
	1 chicken wing	150	9	81
	1 thigh	360	25	225
	1 breast	380	19	171
	Popcorn chicken	380	21	189
	Mash potatoes /gravy	130	4.5	40.5

		Calories	fat g	fat cal
Subway	turkey 6"	280	4.5	40.5
	Club	290	5	45
	Meatball	560	24	216
	Grill chick salad	130	2.5	22.5

So let's suppose that you are at McDonald's with friends, substitute the grilled chicken for the Big Mac (140 calories less), or better yet a grilled chicken salad (270 calories less) will give you more protein with less fat and calories. Small adjustments to your diet are easy to make and produce excellent results. Losing a few holiday pounds is not that hard. Eat thoughtfully.

Exercise is a lifestyle change that can greatly augment your well-being, improve glucose control, lower blood pressure, reduce the risk of heart attack, and help you keep those holiday pounds off. By adding muscle, you increase your baseline metabolism so that you are more resistant to adding fat. After exercise your energy expenditure remains elevated for some time before returning to your resting metabolic rate. The amount of elevation is related to how hard we exercise. The metabolic effect of exercise is the sum of calories expended in exercise plus the extra calories from elevated metabolic rate.

Adding some regular exercise will help you to shed those holiday pounds and make you feel better. Check out the energy expenditures in the table below.

Energy expenditure for common exercise:

Exercise	Calories used up per hour
Walking	245
Hiking or fast walking	410
Jogging	490
Running 12 min/mile	560
Running 10min/mile	700
Bicycling	560-840
Basketball	280-560
Golf (pulling clubs)	310
Tennis	350-560

Putting your lifestyle plan together
First: have a goal in mind. Let's say we want to lose 5 pounds over the next two months. That's a total of 17500 calories to burn or not consume over that period. We can accomplish that in many ways but the following is a sample:

Goal: lose 5 pounds Total calories = 17500 half from diet, half from exercise
8 week plan

	#	calories		per week	8 weeks
Diet change :					
Diet soda instead of 5 sweet drinks/week	5	-140	=	-700	-5600
Chicken Salad instead of BigMac	1	-270	=	-270	-2160
Turkey Sub instead of meatball	1	-260	=	-260	-2080
TOTAL DIET SUBSTITUTIONS					-9840
Exercise change:					
Jogging 30 min 3 days/week	3	-245	=	-735	-5880
Walking 30 min 4 days/week	4	-122	=	-488	-3904
TOTAL EXERCISE					-9784
TOTAL LIFESTYLE MODIFICATION					-19624

Just these small lifestyle changes produced more than enough difference to accomplish the goal of losing 5 pounds during the 8 weeks. If you can't walk or exercise, consult your physician to develop an exercise or rehabilitation plan. Those who are limited in their ability to exercise can still benefit from diet substitutions.

There is no need to carry last year's holiday weight around forever when some simple lifestyle changes can keep it off forever. ***Happy New Year to all.***

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UNIVERSITY OF HAWAI'I CANCER CENTER

BRISK Project

The University of Guam in collaboration with the Cancer Research Center of Hawaii will be conducting a case - control study designed to look at risk factors for breast cancer in women on Guam & Saipan.

Funded by the National Institutes of Health, National Cancer Institute Grant 1 U54CA143728-01

Development of a BREAST Cancer Risk Model for the Pacific

FACTS

- Breast Cancer is the leading cause of cancer-related death among women on Guam & the Northern Mariana Islands
- Chamorro women have the highest age-adjusted breast cancer mortality rate in the population
- No epidemiological or clinical studies have been conducted on Guam or Saipan to study breast cancer risk factors

RESEARCH PROGRAM

- The study will help build a breast cancer risk model for Asian-Pacific women of the Mariana Islands.
- Establish an understanding of breast cancer in the Mariana Islands in relation to lifestyle.
- Create new opportunities for further research in the Pacific.

ELIGIBILITY CRITERIA

- Newly diagnosed with primary, invasive breast cancer (2009 - present)
- No prior history of cancer (other than skin cancer)
- Resident of Guam or Saipan
- Able to provide consent to the study

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