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What are OTC drugs ?

They are Over The Counter drugs that FDA decides that they are safe & effective for use without a doctor's prescription {non – prescription}

FDA classifies these drugs in over eighty categories as

- allergy**
- cough / cold medications**
- pain relievers**
- digestives**
- antibacterial drugs**

OTC drugs have main characteristics

- **Their benefits outweigh their risks**
- **The potential for misuse & abuse is low**
- **Health practitioners are not needed for safe & effective use of product**

Regulations for OTC drugs usage:

(1) THE DOSE

OTC drugs rarely come in one – size fits all so the pharmacist must discuss in full details the dose for the patient according to age & weight also he must mention for how long the drug will be used

(2) CHRONIC DISEASES

Some drugs may interact with health conditions as diabetes, kidney diseases, hepatic disease & high blood pressure So the pharmacist must ask the patient if he suffers from any chronic diseases

example:

For
Nasal

decongestant must not be given to patients of high blood pressure , depression , heart diseases or thyroid diseases

Products containing aspirin must be taken with caution for diabetic patients or patients suffering from gout

(3) Drug - Drug interaction

It is important to know drug interactions if you are giving an otc drug for a patient taking a prescription drug .

For example

***Antihistaminics must not be given with drugs that treat sleeplessness .**

***Drugs that treat sleeplessness are not taken with sedatives or tranquilizers**

***Aspirin is not given with blood thinner drugs**

(4) Drug - Food interaction

***Tetracyclines are not given with milk products**

***Alcoholic patients must avoid antihistaminic drugs**

(5) Secondary symptoms

For example

if a patient suffers from constipation the pharmacist must not prescribe a laxative until asking the patient if constipation is accompanied with nausea or vomiting or not ? If so we don't use laxative & a doctor must be consulted AS A CONCLUSION A questionnaire must be done to the patient including:

- (1) Age & sex (if customer is not the patient)**
- (2) History of chronic diseases & used drugs**
- (3) Life style of the patient i.e his job to avoid giving any sedative drug if his job needs concentration**

Antacid Products

•Stomach is very busy organ . It stores food, mixes food with gastric, secretions & empties food into! The small intestine for digestion & absorption .

* Gastric secretions help with digestion & absorption of food & it also kills bacteria found in the stomach

Gastric Secretions

There are 3 phases of gastric secretions

1- Cephalic phase

It's a para sympathetic response transmitted by the vagus nerve, it is stimulation by the sight, smell or thought of food.

Vagal stimulation causes release of hydro chloric acid , pepsinogen & gastrin

2- Gastric Phase

The presense of food in the stomach initiates the gastric phase of secretin by :

a) physical action

The stretching of fundic mucosa mediates the release of HCL

b) chemical action

Stimulation of HCL release

3- Intestinal phase

It is controlled by the intestine & involves stimulation & inhibition of secretions. As long as partly digested food is in the intestine there is continued gastric secretion.

- The PH of gastric acid is extremely high 4 million times more acidic than pH of blood. The stomach has a lining to protect it from this acid. The lining secretes mucus & bicarbonates which form a barrier against acid.

Risk factors for hyper acidity & ulcers

- 1. Some medications as aspirin , caffeine , indomethacins & corticosteroids**
- 2. Alcohol intake**
- 3. Smoking**

Symptoms of hyper acidity

- 1. Heart burn**
- 2. Gases**
- 3. Indigestion**

N.B. if hyper acidity is un properly controlled ulcers may occur.

Ulcers may be acute mainly in stomach & rarely duodenum as result of drugs & food style. This ulcer heals rapidly & rarely requires chronic antacid therapy. Chronic mainly in duodenum.

To differentiate between duodenal ulcer & gastric ulcer

The pain of gastric ulcers occurs within 30 to 60 min after meals & lasts between 60 & 90 min .

The pain of duodenal ulcer begins 2 to 3 hours after meals & continue untill the next meal.

N.B H₂ is a type of acid

Antacids

1. H₂ – antagonist

Treat ulcers & HEART BURN

They block the formation of excess acid in the stomach

N.B should not be taken for more than 2 weeks

2. non H2 antagonist

(neutralizing of the gastric acid in the stomach)

e.g. (Ca Co₃ short term treatment)

**Sod. Bicarbonate contraindicated in C H F , hypertension ,
kidney failure (instant relief)**

- AL SALTS V. slowly & cause constipation.**
- Mg. Salts moderate & cause diarrhea.**
- Aluminium accompanied by magnesium salts are best used.**

The pharmacists advise to the patient :

1) Compliance:

The antacid should be taken on schedule 1 hr after meals to provide max. duration of activity.

2) Change in Bowel habits:

To prevent self-medication for an iatrogenic condition, the patient should understand that the antacid may cause diarrhea or constipation. Control is usually provided by giving an alternative antacid

3) Sodium content:

Patients with restricted salt intake should be informed of the amount of Na in the medication & advised of product of low sodium content.

4) Tablets

The lesser effectiveness of tab should be made clear. If liquid are unacceptable, tablets should be chewed thoroughly & followed with a full glass of water to help dissolution & dispersion in the stomach. Effervescent tablet should be dissolved in water & the bubbles should subside before swallowing.

5) Other medicatins

Additional medication should be identified to enable the pharmacist to monitor for drug interaction

6) Duration of usages

We must assure that Non-h₂ antagonist antacids should not be used more than 6 weeks & H₂ antagonists must not be used more than 2 weeks.

As general If discomfort is not relived after 2 weeks of therapeutic doses medical help is indicated

Questionnaire to patients

- 1. how long has the burn been present?**
- 2. When dose pain occur? After meals or several hours before meals (to determine if there is ulcer or not) ?**
- 3. Have you vomited blood or any blood in stool?**
- 4. What medications are you currently taking?**
- 5. Have you used antacids before? Which ones?**
- 6. Are you on any dietary restrictions such as a low salt diet?**
- 7. Are you under the care of a physcian?**

ANTHELMINTICS

Drugs are used to treat worms (helminth)

-Few effective non-prescription drugs are available for helminth infections that self-medication should be discouraged.

The following show some common helminth infections & their symptoms & suggested treatment:-

(1) Round worm (Hookworm)

Source of infestation

Spreading by contact with contaminated soil. Larvae are ingested or penetrate the skin on contact

SYMPTOMS

***Anemia caused by blood loss ; weakness**

***Indigestion ;vomiting ;diarrhea**

***Anorexia**

***Headache**

***Cough**

***Urticaria at the site of entry into the skin**

Treatment

chloroethylene Prescription drugs only ,mainly tetra

(2) ASCARIS LUMBRICOIDES

Source of infestation

Indigesting eggs through contact with fecally contaminated soil

Symptoms

Mild cases may be asymptomatic .GIT discomfort pain &diarrhea.Intestinal obstruction in severe cases occasionally bile or pancreatic duct may be obstructed & allergic reactions occur

(3) ENTEROBIUS VERMICULARIS (OXYURIS) ***PINWORM, SEAT WORM , THREAD WORM***

Source of infestation

Ingesting eggs by fecal contamination of hands ,food,clothing & bedding.Reinfection is common

SYMPTOMS

Indigestion, intense perianal itching especially at night resulting in loss of sleep .Scratching may cause infection ,irritability & fatigue in children

TREATMENT

Mostly it can be treated with mebendazole.

Simultaneous treatment of every member of the family is advised for best results

PHARMACIST advises for **patients of oxyuris infestation**

- 1. A daily morning shower to remove eggs deposited in the perianal region during night [as female worm migrates down the colon out the anus & deposits the eggs in the perianal region at night]**
- 2. Regular application of ammoniated mercury oint. Over the perianal region at bed time as it is toxic for eggs & we may use also antipruritic oint.**
- 3. Regular trimming of an infected child's nail & scrubbing of the fingers with a brush after going to bathroom.**
- 4. Daily use of disinfectants on the toilet seat**
- 5. Frequent washing of hands before meals**

summary

The clinical manifestations of these parasitic disease are so general & so characteristic of other illness that attempts at self-diagnosis of helminthiasis are not only difficult but could lead to the neglect of a more serious condition.

N.B Diagnosis should be made on basis of clinical & laboratory evidence

QUESTIONNAIRE TO PATIENT

- 1. Have you had nausea , diarrhea or abdominal pain?**
- 2. Have you been bothered by itching in the anal area?**
- 3. Have you lost weight or do you become fatigued easily?**
- 4. How long have the symptoms been present?**
- 5. If the patient is not an adult ,what is the age and approximate weight of the patient?**
- 6. Have worms appeared in your stool?**
- 7. Are other members of you family also affected?**

ANTI-DIARRRHEAL **DRUGS**

DIARRRHEA is the frequent passage of unformed stool

Types of diarrhea

1)Acute diarrhea

Sudden onset of loose stool in a previously healthy patient

2)Chronic diarrhea

Persistent or recurrent episodes with anorexia , weight loss &chronic weakness.

Some types of acute diarrhea & its treatment

| TYPE | HISTORY | SYMPTOMS | DUR ATI ON | TREATMENT |
|-------------------|---|--|---------------------------|---|
| Salmonella | Recent ingestion of contaminat- ed food (12-24hrs) | Sudden onset of abdominal cramps , watery diarrhea , nausea,vomiting,f ever | 1-5 days | Symptomatic , Bed rest ,fluid &electrolyte replacement |
| SHIGELLA | Affects all age group | Sudden onset of abdominal cramps, diarrhea containing shreds of mucus&specks of blood.fever | 4-7 days | As salmonella |

| TYPE | HISTORY | SYMPTOMS | DUR ATI ON | TREATMENT |
|------------------------------|---|---|---------------------------|--|
| ESCHERIC HIA COLI | Affects children under2 &elderly in over crowded environmen t (as hospitals) | Abdominal cramps &fever | 7-21 days | Antibiotics ,fluid &electrolyte replacement |
| VIRAL INFANTILE | Children &infants usually in summer &autumn | Abrupt onset watery diarrhea , slight fever ,frequent vomiting &upper respiratory symotoms | 1-21 day | Symptomatic &supportive fluid replacement |

| TYPE | HISTORY | SYMPTOMS | DUR ATI ON | TREATMENT |
|-------------------------|--|--|---------------------------|--|
| TRAVELLE R | Travel outside of normal locus | Sudden onset , nausea,abdomina l cramps | 1-14 days | Symptomatic&su pportive |
| DRUG INDUCED | -Broad spectrum antibiotics nitrofurant oin laxatives ferrous sulphate colchicine | Sudden onset rectal urgency.abdomin al cramps | varia ble | Reduce dose or discontinue drug |

CHRONIC DIARRHEA

History of repeated episodes , poor health

SYMPTOMS :

Weight loss, anorexia , mucus& OR blood in feces

TREATMENT:

Depends on etiology

Some Antidiarrheal drugs

1) Adsorbents

As kaolin , Aluminum hydroxide ,Pectin , activated charcoal.They adsorb nutrients ,digestive enzymes ,toxins &bacteria,They are safe

2) Anticholinergics

They are used when diarrhea is due to an increase in intestinal tone &Peristalsis.They must be accompanied by antidiarrheal drugs.

N.B Not to be used by persons having glaucoma or elderly persons

3) Lactobacillus preparations

The flora of GI tract plays a significant role in maintenance of bowel function in nutrition. Antibiotic therapy often disrupts the balance of intestinal & bowel function.

Seeding the bowel with viable lactobacillus acidophilus & L. bulgaricus micro-organisms has an effective treatment for functional intestinal disturbances including diarrhea.

The micro –organisms are effective in suppressing the growth of pathogenic micro-organisms & re-establishing the normal intestinal flora

QUESTIONNAIRE TO PATIENT

- 1. Is diarrhea associated with other symptoms such as fever, vomiting or pain?**
- 2. How long has the problem existed? was it sudden in onset?**
- 3. Can you relate the onset of diarrhea to a specific cause such as particular food or drug?**
- 4. Is the patient an infant or small child?**
- 5. Is there blood or mucus in the stool**
- 6. What medicines are you currently taking?**
- 7. Do you have any chronic disease?**
- 8. Have you tried any antidiarrheal products?**

LAXATIVES

Laxatives products facilitate the passage and elimination of feces from the colon & rectum

Causes of CONSTIPATION

- 1. Neglecting to respond to the defecation urge**
- 2. Failure to acquire the habit of regular defecation**
- 3. Environmental changes**
- 4. Faulty eating habits & limited water intake**
- 5. Atony or hypertonicity of the colon**
- 6. Insensitivity of the defecation reflex initiated by fecal mass in the rectum**
- 7. Mental stress**
- 8. Excessive ingestion of foods that harden stools such as processed cheese**
- 9. Prolonged use of drugs such as aluminum hydroxide; calcium carbonate; anti-cholinergic drugs**

Types of Laxatives

[1] Stimulant Laxatives

Increase peristaltic activity of the intestine by local irritation of the mucosa or action on smooth muscles of the intestine to increase motility

N.B.stimulant laxatives are contrindicated with abdominal pain ;nausea;vomiting which are some of symptoms of appendicitis

E.g. ANTHRAQUINONES (Senna &Cascara)

BISACODYL (Biscadyl tab. & supp)

Misuse of stimulant laxatives may cause dehydration &severe cramping

[2] Bulk-forming Laxatives

They are natural & semi synthetic ; polysaccharides & cellulose derivatives that swell in the intestinal fluid

They should be mixed with water just before ingestion & administered with a large amount of fluid

E.g. Metamucil ; Agiolax

[3] Emollient laxative

Diocetyl sodium sulfosuccinate[DSS] is a surface active agent which when administered orally increases the wetting efficiency of intestinal water & promotes the formation of oil in water emulsion. It facilitates admixture of aqueous & fatty sub. with the fecal mass to soften it.

N.B. It is added also to enema in case of fecal impaction

[4] Saline laxatives

Non-absorbable anions & cations such as magnesium & sulphate ions. It osmotically causes retention of water in the intestinal lumen thus by mechanical stimulus increase intestinal motility

ADVICE to patients concerning laxative products

- 1. Laxatives are not for long term use
i.e. If not effective after one week a physician should be consulted**
- 2. Laxative products that contain sodium ; potassium ; or magnesium should not be used if there is kidney disease**
- 3. Saline laxatives should not be used daily & should not be administered orally to children under six years or rectally to infants under two years**
- 4. Stimulating laxatives are not used if there is abdominal pain ; nausea & vomiting**

QUESTIONNAIRE TO PATIENT

- 1. What is the normal frequency of your bowel movement? How has it changed?**
- 2. Have you experienced symptoms as abdominal pain or weight loss?**
- 3. Are you under the care of a physician for any illness?**
- 4. Have you attempted to alleviate constipation by dietary measures such as increasing fruit consumption?**
- 5. Which laxative products have you used previously ?**

ANTIEMETICS

Nausea & vomiting are symptoms to many serious & minor disorders

CONSIDERATION TO DETERMINE WHETHER AN ANTIEMETIC IS INDICATED ARE :

(a)AGE OF PATIENT

#Vomiting in newborns may be simple as a result of overfeeding or feeding too quickly this case maybe resolved without drug therapy.

#Vomiting maybe due gastroenteritis &this can be controlled by carbonated beverages.

#Vomiting maybe produced by acidosis & dehydration secondary to severe diarrhea so rehydration may control this vomiting

(b) SEX OF THE PATIENT

Nausea & vomiting maybe one of the earliest symptoms of pregnancy. This can be overcome by trying small frequent feedings to control morning sickness

(c) CURRENT Drug use

e.g. DIGITALIS toxicity maybe manifested as nausea & vomiting

Other drugs as tetracyclines , estrogens & opiates analgesics can cause side effects as nausea & vomiting

d) DURATION of vomiting & blood in the vomitus

A patient who vomits forcefully several times a day for 2 or 3 days or who has blood in the vomitus must be referred to a physician for diagnosis of the cause

(e) MOTION sickness

Motion sickness can be controlled by antihistamines & parasympatholytics

QUESTIONNAIRE TO PATIENT

- 1. What is the age of the patient for whom the antiemetic is intended?**
- 2. Is the patient pregnant ?**
- 3. How long has nausea & vomiting been a problem ?**
- 4. Have you noted blood in the vomitus ?**
- 5. Have you noted other symptoms as abdominal pain ,headache or diarrhea?**

HEMORRHOIDAL **Products**

Hemorrhoids are a form of varicose (swollen or knotted) veins that occur when the veins around the anus become swollen or irritation or bleeding around the anus

HEMORRHOIDS ARE CLASSIFIED **ACCORDING TO THEIR DEGREE** **OF DEVELOPMENT**

1) FIRST Degree

**Number & size of veins of anal canal are increased
& sometimes bleeding may occur**

N.B. Not prolapsed

2) SECOND Degree

Internal or mixed hemorrhoids that appear outside during defecation but return spontaneously to the anal canal where they remain until defecation

3) THIRD Degree

Internal & mixed hemorrhoids remain constantly outside the anal sphincter unless they are replaced by hand

4) FOURTH Degree

These are hemorrhoids that have developed an edematous skin covering & have become so large that they cannot be returned into the anal canal

THERE ARE TWO WAYS to treat hemorrhoids using OTC Drugs

1) CREAMS & SUPPOSITORIES

They relieve most of the symptoms .They contain soothing agents that contains an antiseptic , an astringent (as bismuth ,witchhazel & zinc oxide)or a vasoconstrictor (shrinks blood vessels) & some local anesthetic (pain blocker) to ease pain.

These creams & suppositories decrease swelling , burning & itching

2) RELIEVE CONSTIPATION

Laxatives soften waste to ease its passage through the intestine

QUESTIONNAIRE TO PATIENT

- **Have a physician diagnosed the problem as hemorrhoids ?**
- **Are you having minor discomfort (itching & irritation) or is there severe pain & bleeding ?**
- **Do you strain at the stool ?**
- **Are you pregnant ?**
- **Have you tried any products for the condition ?**

COMMON COLD

PRODUCTS

Contrary to popular belief going outside on a cold day with wet hair does not cause a person to catch common cold.

Viruses, tiny disease producing particles are the cause & is transferred from person to another via the air or objects such as telephones

SYMPTOMS

#running or stuffy nose

#coughing

#sneezing & sore throat

TREATMENT

- **there is no cure for a cold or flu**
- **The only medical option is treatment of symptoms**
- **They usually contain antihistamines, decongestants & analgesics such as aspirin or ibuprofen**

N.B. # If symptoms persist for seven to ten days & include fever, tiredness & headache it could be influenza (flu) & treatment may include broad spectrum antibiotic to avoid complications.

- **Topical decongestant e.g. otrivin drops should not be used for more than three days because there is a risk of developing a problem called rebound congestion**

QUESTIONNAIRE TO PATIENT

- 1. How old are you?**
- 2. what are the symptoms?**
- 3. Have youa a history of allergy or asthma?**
- 4. Do you have diabetus , glucoma or hypertension?**

COUGH

MEDICATIONS

There are two types of cough

- 1. PRODUCTIVE COUGH**
- 2. DRY COUGH**

1-PRODUCTIVE Cough

Cough which bring up phlegm (mucus produced by the mucus membrane in chest & lungs)

EXPECTORANTS used in cases of reproductive cough act EITHER BY

- Direct stimulation of secretory glands of the lower respiratory tract**
- Reflex stimulation of respiratory secretions**

Examples of chemical expectorants

A. Ammonium chloride

acts by direct stimulation of secretory glands

B. POTASSIUM iodide

act both reflexly & directory

NOW A DAY the motto BACK TO NATURE is strongly applied .They found some natural extracts & tinctures are used as expectorants

Examples of natural expectorants

A. Tr.SCILLA

It increases the water contents of sputum thus decrease the sputum viscosity leading to easily expectoration

B. Tr.LOBELIA

Has a stimulatory effect for the release of epinephrine from the supra renal gland leading to relaxation of the bronchial smooth muscles

C. Tr.STRAMONIUM

Has a parasympatholytic effect leading to bronchodilatation

2-DRY cough (Non –productive cough)

Cough suppressants act by relatively selective depressing effect on the cough control center in the medulla.

Some natural products as liquorice has a demulcent effect thus giving a soothing effect.

N.B OTC COUGH DRUGS ARE DEALING with cough not associated with fever

QUESTIONNAIRE TO PATIENT

- 1. How old is the patient ?**
- 2. Type of cough (productive or non-productive)**
- 3. Do you have any respiratory diseases such as asthma or bronchitis?**

INTERNAL **ANALGESICS**

**PAIN IS CATEGORIZED ACCORDING TO ITS
ORIGIN:-**

1-Somatic Pain

Originate from the musculo skeletal system or skin

2-Visceral Pain

**Originate from the organs or viscera of the thorax
&abdomen**

OTC ANALGESICS are more effective in treating musculo skeletal or somatic pain than visceral pain

OTC ANALGESICS ARE USED FOR :

- 1. HEADACHE**
- 2. NEURALGIA(peripheral nerves)**
- 3. ARTHRALGIA (joints)**
- 4. MYALGIA(muscles**

1-HEADACHE

N.B/If headache is associated with nausea & vomiting ,blurred vision ,dizziness or hearing loss a physician must be consulted.BLOOD pressure must be put in consideration

TO DIFFERENTIATE between different types of headache

a-Tension headache

symptoms:

- * Feeling of tightness
- * Pressure at base of the head
- * Localized pain in the forehead & base of skull

b-Sinus headache

symptoms:

- * It's location is restricted to the frontal areas of the forehead & scalp & behind or around the eyes .
- * It's accompanied by nasal congestion .
- * Treatment is usually by analgesics & Decongestants

2-NEURALGIA

Pain in the distribution of a sensory nerve.

Symptoms:Sharp pain in the face or jaw region

OTC analgesics are helpful in alleviating this type of facial pain

3-MYALGIA

Pain from skeletal muscles. We use OTC analgesics and adjunctive treatment with rubefacients & counterirritants & heat

4-ARTHALGIA

Pain in the joints. The cause of joint pain is the inflammation of synovial membrane

SOME OTC
ANALGESICS

1)ASPIRIN {acetyl salicylic acid }

IN 1897 german chemist FELIX HOFFMAN developed aspirin while trying t find a way to relieve the painof his father's arthritis.He worked in a company called Bayer.

***Aspirin works by inhibiting the release of hormone-like substance called prostaglandin.**

***Prostaglandin affects blood vessels & the functions of blood platelets & sensitizes nerve endings to pain.**

***By limiting prostaglandin aspirin affect blood clotting ,eases inflammation & prevents the nerve ending at the site of the pain from becoming stimulated**

USES

Headache ,muscle pain ,arthritis,&to reduce fever

N.B.

ASPIRIN can irritate the stomach so we can:

***Give it as buffered to reduce the irritation of stomach**

***Enteric –coated so as to pass through the stomach into the small intestine**

***Take aspirin with an antacid or after meals to reduce stomach irritation**

Side effects of aspirin

- 1. High doses cause ringing in the ear**
- 2. If children or adolescents infected with chicken pox or influenza (flu) are given aspirin they could develop Reye's syndrome.**
- 3. Aspirin should not be given to someone directly or after surgery as it decreases blood's ability to clot & cause excessive bleeding**
- 4. Should not be used to children under the age of twelve or pregnant women specially during the last three months as it can cause complications during delivery.**

2)ACETAMINOPHEN

As Tylenol & Excedrin

***Works by affecting the brain & spinal cord altering the perception of pain.**

***Acetaminophen is similar to hormones that the brain produces called ENDORPHINS. These hormones stop the pain sensation from being transmitted from cell to cell.**

***It reduces fevers by affecting the area of the brain that regulates temperature.**

N.B. Acetaminophen not used as anti-inflammatory

3)IBUPROFEN

It works like aspirin by inhibiting production of prostaglandin. It is a stronger analgesic than aspirin or acetaminophen & a better anti-inflammatory.

BRAND name :Brufen , Advil

Ketoprofen & naproxen are pain reliever similar to ibuprofen

Side Effect

***Drowsiness**

***Heart –burn**

***Upset stomach**

QUESTIONNAIRE TO PATIENT

- 1. Do you have asthma diseases or ulcers?**
- 2. Are you now taking any medication which affects the clotting of your blood?**
- 3. Have you ever had an allergic reaction to aspirin?**
- 4. What type of pain do you have & how long have you had it?**
- 5. Do you have any other symptoms which you feel associated with the pain you have?**

ANTI-ACNE DRUGS

What is acne?

During puberty an increase in hormones causes oil glands on the face, neck & chest to become stimulated .The glands produce large amount of sebum(a fatty substance).Sebum normally flows out of the skin along the hair follicles.

Too much sebum combined with skin debris can form a plug in the hair follicle called A Black Head

Once the hair follicle becomes plugged bacteria grow in it. The bacterial infection is called ACNE.

In severe cases of deep acne , inflamed cysts may form & can cause permanent scars.

N.B. Acne may also occur in elder people. Certain drugs , industrial chemicals , oily cosmetics or hot humid conditions may also cause acne.

OTC Topical anti acne products contains

1)SULPHUR

Usually used in conc. From 2 to 10%

It helps to resolve comedones

2)RESORCINOL & SALICYLIC ACID

Have also comedogenic effect but more stonger than sulphur

Resorcinol is used in conc.1 to 4%

3)Benzoyl Peroxide

Works by mildly irritating the skin thus encourage skin cells to slough off &thus helps open blocked pores.Also benzoyl peroxide kills bacteria thus prevent black heade from turning into pimples.

N.B AVOID unnecessary sun exposure &use sun screen if treating acne with benzoyl peroxide

OTC Oral anti-acne products

1) Tetracyclines

They are successful in the treatment of inflammatory acne

2) YEAST tablets

Yeast is a perfect source of natural B group vitamins. The B group vitamins play a role in many metabolic processes as they provide the body cells with necessary energy & help in keeping healthy appearance of skin

ADVISES TO PATIENTS

- 1. Regular washing with soap & water (soap may be medicated as sulphur , salicylic &antibacterial soaps or unmedicated in highly sensitive skin)**
- 2. Moderate exposure to sunlight or using sun screens**
- 3. A balanced diet (eating lot of vegetables & avoid chocolates &fatty foods)**

QUESTIONNAIRE TO PATIENT

- 1. What types of medications are you currently using?**
- 2. Types of cosmetics u are using?**
- 3. How old are you ?**
- 4. How long have you had acne ?**

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