

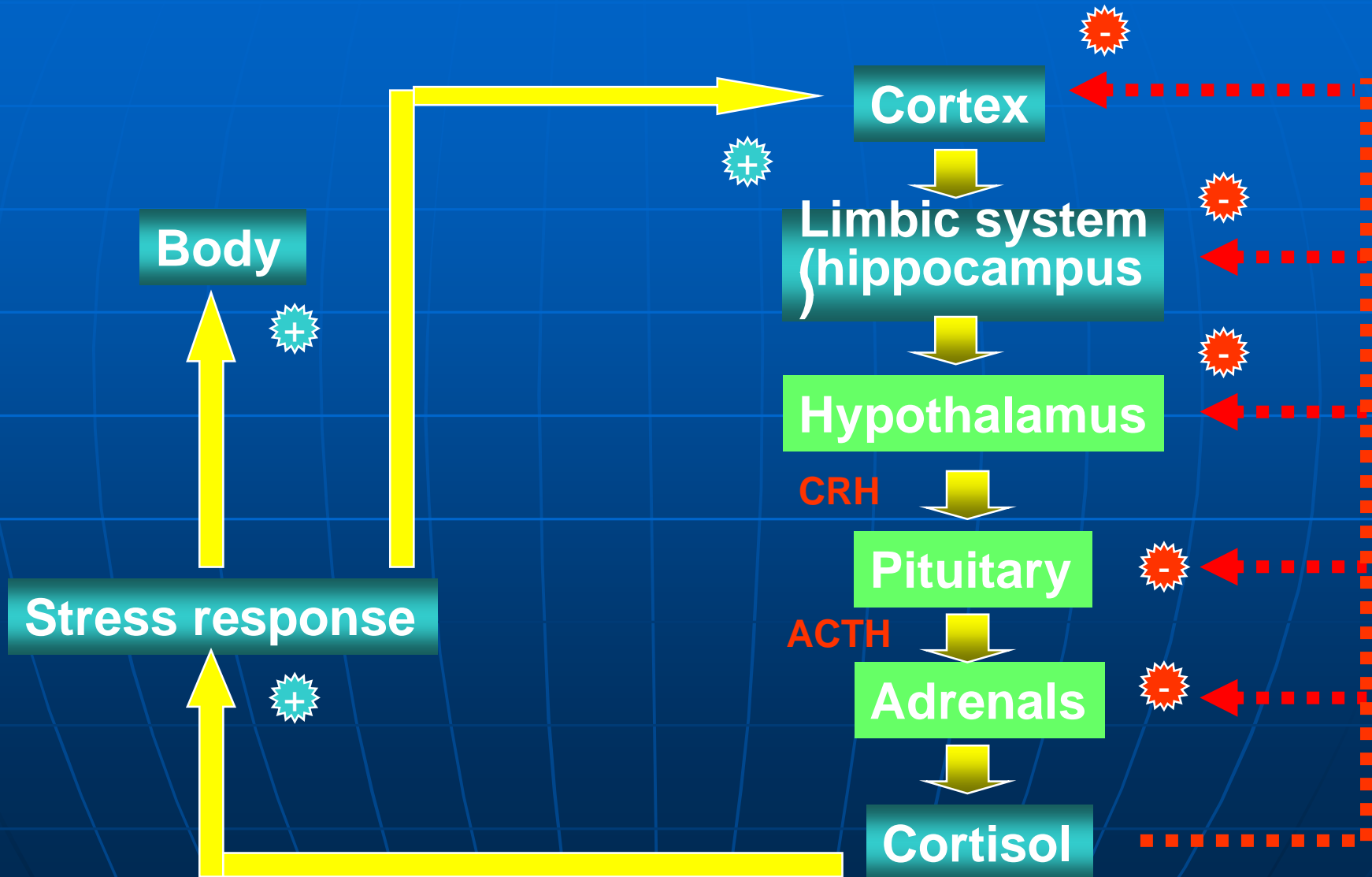
psychosomatic disease

**Teaching and Research office of
Psychiatry, West China medical
school S.U.**

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(psychophysiological disorder)
- n **Classification of psychosomatic disease**
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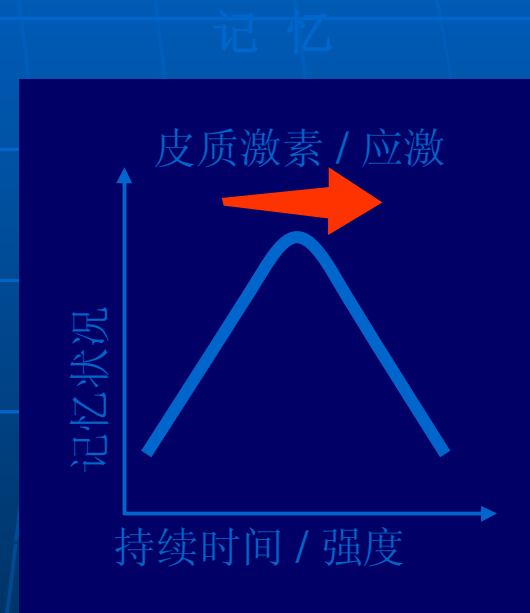
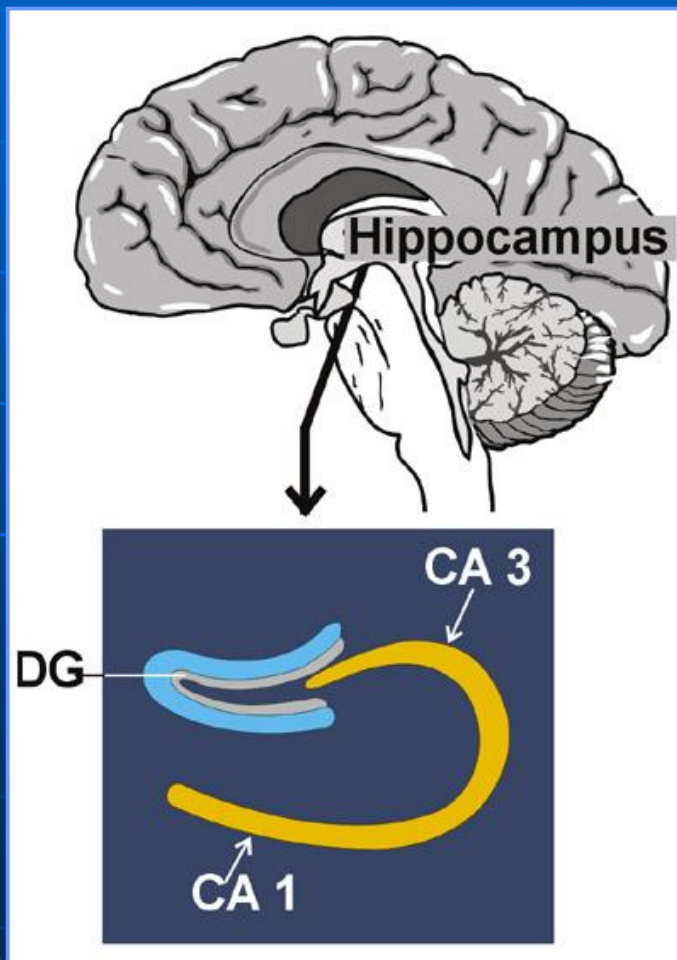
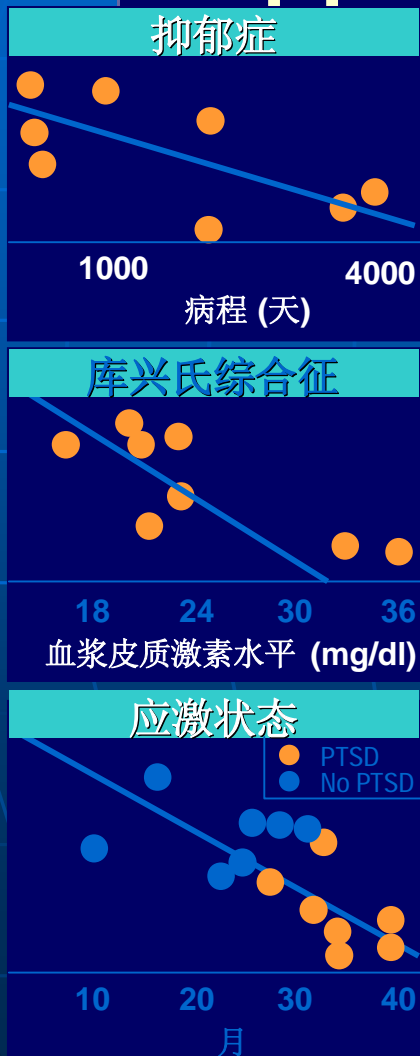
Stress and HPA axis



stress---

Hippocampus and memory

海马的体积



Animal model of social-psycho stress



~ 1小时/天

其它时间

缺乏

- 出路
- 前途
- 控制力

It felt worse and worse

the mechanism of psychostress of rat model



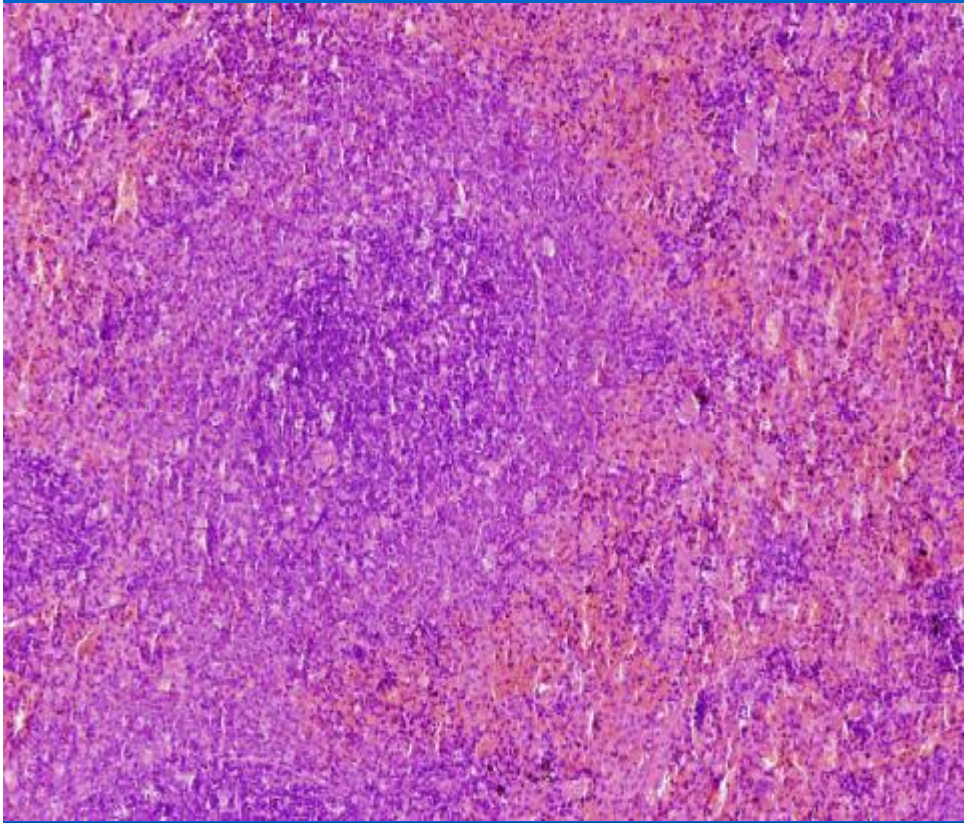
compulsive swimming



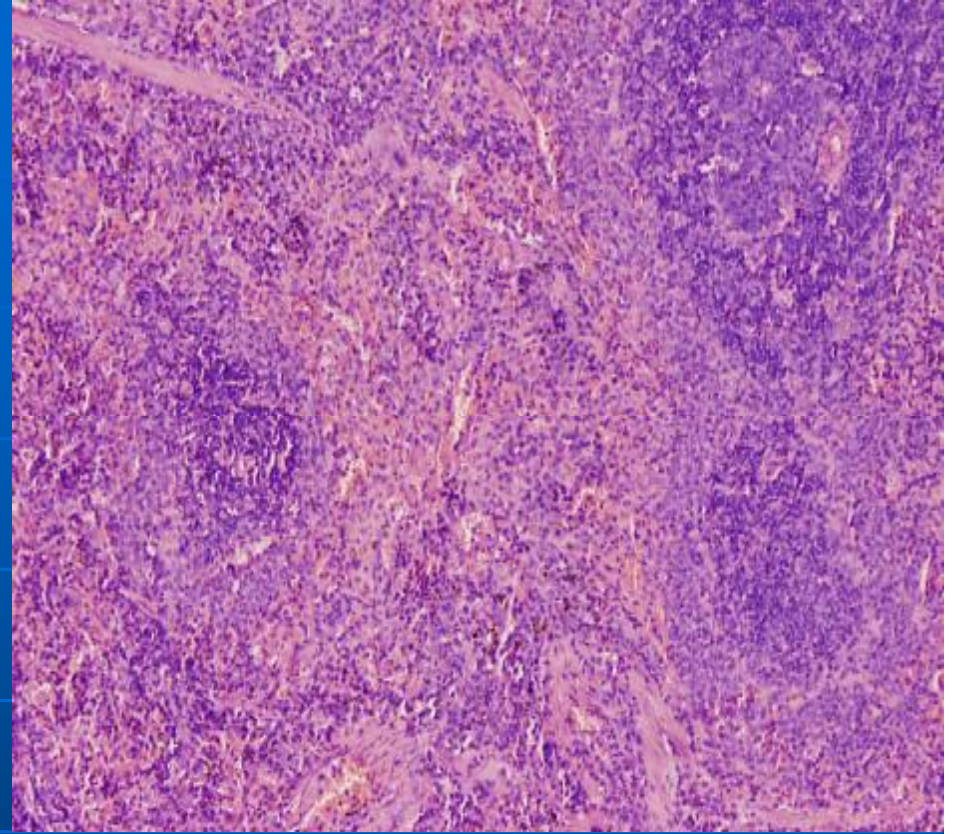
cold stimulation



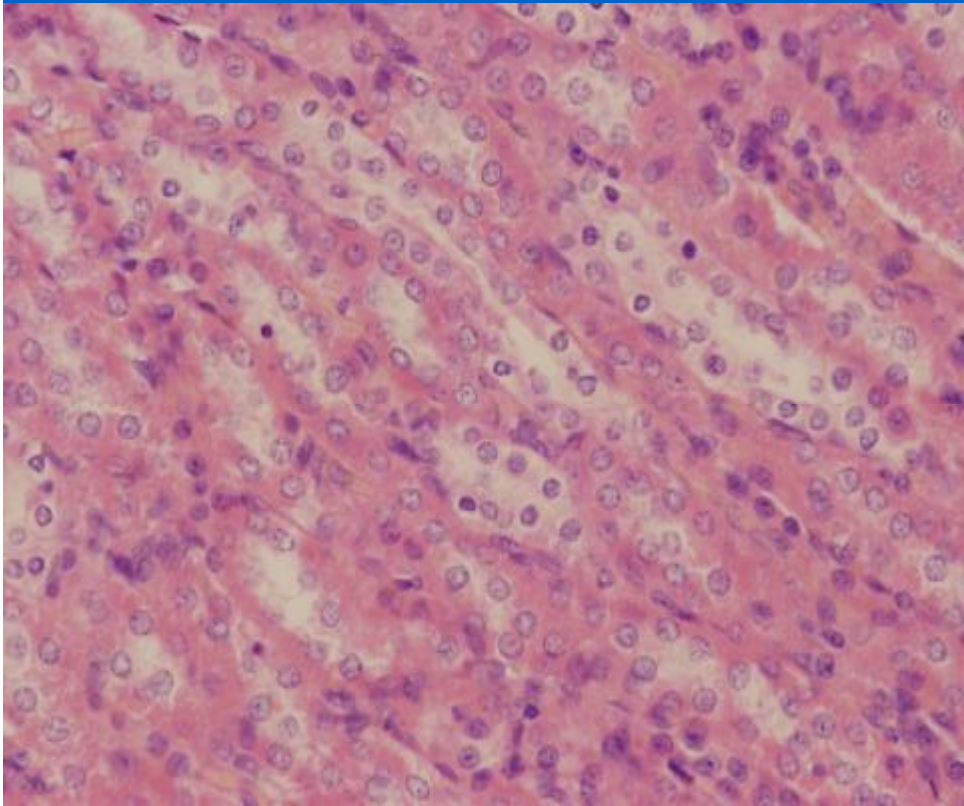
Rotation stimulation



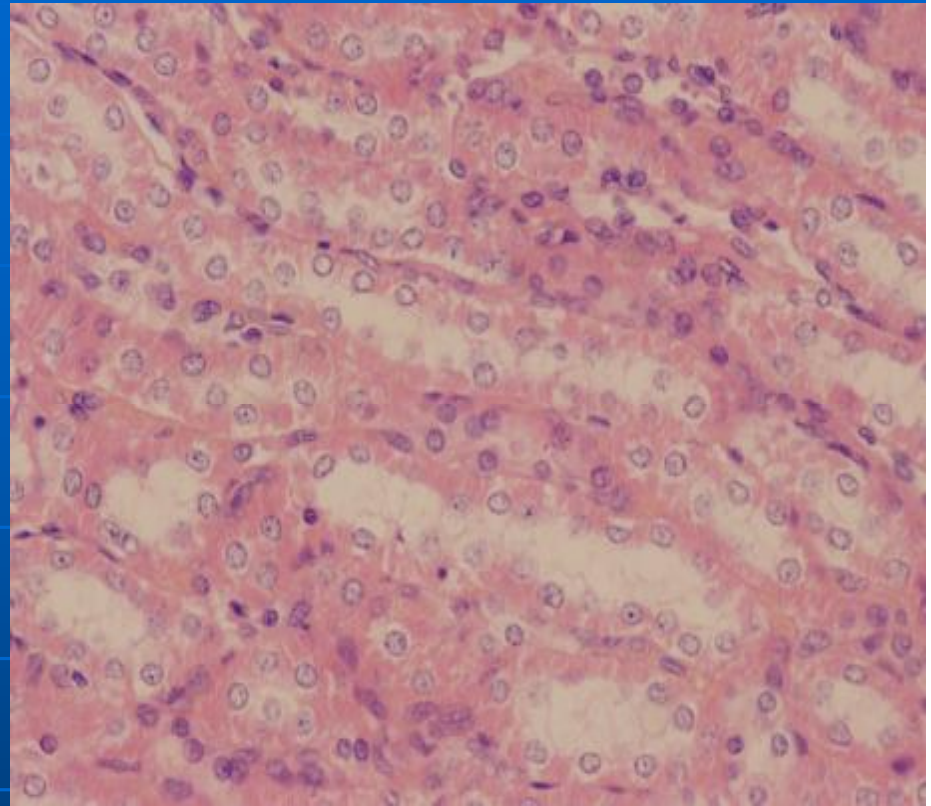
control



**Stress group: red part of spleen increase,
hyperemia**



Normal control



Adrenal cortical cytoplasm is light

What is psychosomatic disease

- n Specify that psychological factors adversely affect patient's medical conditions in one of several ways.

What is psychosomatic disease

- n The factors influenced the course of general medical conditions by association between the psychological factors and the development or exacerbation or delayed recovery from the general condition

What is psychosomatic disease

- n The factors interfere with the treatment of the general medical conditions
- n The factors constitute additional health risks for the individual

Classification according system

1. Cardiovascular system

- n coronary artery disease

- n essential hypertension

- n Cardiac arrhythmias

2. Respiratory system

- n bronchial asthma

- n hyperventilation syndrome

Classification according system

3. Gastrointestinal system

- n peptic ulcer

- n ulcerative colitis

4. Endocrine system

- n diabetes mellitus

- n hyperthyroidism

Classification according system

5. Musculoskeletal system

- n rheumatoid arthritis
- n low back pain

6. Neurological system

- n migraine headache
- n tension headache

Mechanism (etiology)

n Chronic, severe and perceived stress play some causative role in the development of these diseases

n Social readjustment rating scale

Death of spouse, 100 life-change units

Divorce, 73 units

Marital separation, 65 units

Death of a close family member, 63 units

Accumulation of 200 or more life-change units in one year increases the incidence of psychosomatic diseases.

Mechanism (etiology)

- Face general stresses optimistically, rather than pessimistically, are not apt to experience psychosomatic diseases; if they do, they are apt to recover easily
- The mediator between cognitively based stress and disease may be hormonal

Mechanism (etiology)

- n The mediator may be changes in the functioning of the anterior pituitary-hypothalamic-adrenal axis, with autonomic effects, adrenal enlargement, and lymphoid shrinkage.

Answer these questions with yes or no

1. 你说话时会刻意加重关键字的语气吗？
2. 你吃饭和走路时都很急促吗？
3. 你认为孩子自幼就该养成与人竞争的习惯吗？
4. 当别人慢条斯理做事时你会感到不耐烦吗？
5. 当别人向你解说事情时你会催他赶快说完吗？
6. 在路上挤车或餐馆排队时你会感到激怒吗？
7. 聆听别人谈话时你会一直想你自己的问题吗？
8. 你会一边吃饭一边写笔记或做其他事吗？

- 9 你会在休假之前先赶完预定的一切工作吗？
- 10 与别人闲谈事你总是提到自己关心的事吗？
- 11 让你停下工作（或学习）休息一会时你会觉得浪费了时间了吗？
- 12 你是否会全心投入工作（或学习）而无暇欣赏周围的美景？
- 13 你是否觉得宁可务实而不愿从事创新或改革的事？
- 14 你是否尝试在时间限制内做出更多的事？
- 15 与别人有约时你是否绝对遵守时间？
- 16 表达意见时你是否握紧拳头以加强语气？
- 17 你是否有信心再提升你的工作（学习）绩效？
- 18 你是否觉得有些事等着你立刻去完成？

19 你是否觉得与人竞争时非赢不可？

20 你是否对自己的工作（学习）效率一直不满意？

21 你是否经常打断别人的话？

22 看见别人迟到你是否会生气？

23 用餐时你是否一吃完就立刻离席？

24 你是否经常有匆匆忙忙的感觉？

25 你是否对自己近来的表现不满意？

This questionnaire of A type Personality

If the answers “yes” are more than half,
you should change your habits, and slow
down

Specific Disorders

n **Coronary artery disease**

Personality type (A type)

n **aggressive and compulsive personalities**

n **with a tendency work long hours**

n **and to seize authority**

**Type A personalities strongly associated with
the development of Coronary artery disease**

Specific Disorders

n Coronary artery disease

Treatment

- n To alleviate the psychic distress such as anxiety and depression associated with the disease ----diazepam, SSRIs
- n to treat pain with analgesics

Specific Disorders

Essential hypertension

- n Characterized by a blood pressure of 160/90mm Hg or higher
- n 20% of the adult population in the United States is hypertensive

Personality type (A type)

- n Congenial compliant compulsive
- n Their anger is not expressed openly, they have much inhibited rage, which they handle poorly

Specific Disorders

n **Essential hypertension**

Treatment

- n **Supportive psychotherapy**
- n **Behavioral techniques (biofeedback, meditation and relaxation therapy)**
- n **Comply with anti hypertensive medication regimen**

Specific Disorders

Cardiac arrhythmias

- n Palpitations, ventricular tachycardia, and ventricular fibrillation sometimes occur in conjunction with an emotional upset
- n Associated with emotional trauma are sinus tachycardia, ST-wave and T wave changes, ventricular ectopy, increased plasma catecholamines, and free fatty acid concentrations
- n Emotional stress is nonspecific, as is the personality description associated with the disorders

Specific Disorders

Cardiac arrhythmias

Treatment

- n Psychotherapy
- n B -blocking drugs, such as propranolol(Inderal)

Specific Disorders

Bronchial asthma

- n The rate and depth of a healthy person's breathing can be changed voluntarily to correlate with various emotional states, such changes are aggravated and prolonged in people with asthma

Specific Disorders

Bronchial asthma

Psychological factors

- n Characterized as excessive dependence needs
- n In many asthmatic patients a strong unconscious wish for protection and for envelopment by the mother or surrogate mother

Specific Disorders

Bronchial asthma

Psychological factors

- n The mother figures tend to be overprotective and oversolicitous, perfectionistic, dominating, and helpful
- n When protection is sought but is not received, an asthma attack occurs

Specific Disorders

Bronchial asthma

Treatment

- n Separated from their mothers (so-called parentectomy), asthma improved
- n Individual, group, behavioral (systematic desensitization), and hypnotic
- n Treated jointly by internists, allergists, and psychiatrists
- n B-adrenergic receptor antagonists are contraindicated

Specific Disorders

Peptic ulcer

Circumscribed ulceration of the mucous membrane of the stomach or the duodenum

The ulceration penetrates to the muscularis mucosae and occurs in areas exposed to gastric acid and pepsin

Specific Disorders

Peptic ulcer- Etiology

Specific factor:

- Chronic frustration of intense dependence needs results in a characteristic unconscious conflict
- this conflict causes a chronic regressive unconscious hunger and anger, leading to acid hypersecretion
- with above equation, ulcer formation may result

Specific Disorders

Peptic ulcer- Etiology

Non-Specific factor:

- stress and anxiety caused by various nonspecific conflicts may produce gastric hyperacidity and hypersecretion of pepsin and may result in a ulcer
- Traumatic occurrences in animals (electric shock in dogs), may produce ulcers, support nonspecific approach

Specific Disorders

Peptic ulcer

treatment:

- psychotherapy is directed toward patient's dependence conflicts
- Biofeedback and relaxation therapy may be useful
- Medical treatment: cimetidine, ranitidine, sucralfate, famotidine
antacid medication
dietary control

Specific Disorders

Ulcerative colitis

Personality type

- n predominance of compulsive personality traits
- n are neat, orderly, clean, punctual,
- n hyperintellectual, timid
- n inhibited in expressing their anger

Specific Disorders

Ulcerative colitis

Treatment

- n Acute Ulcerative colitis: Nonconfrontational, supportive psychotherapy
- n Quiescent period: interpretative psychotherapy
- n Medical treatment: anticholinergics and antidiarrheal agents
- n Severe case: prednisone therapy

Specific Disorders

Hyperthyroidism

Characterized by biomedical and psychological changes that occur as the result of a chronic endogenous or exogenous excess of thyroid hormone

Specific Disorders

Hyperthyroidism

psychosomatic factors

- n Stress is associated with the onset of hyperthyroidism
- n Unusual attachment to and dependence on a parent (mother), and so could not tolerate any threat to their mother's approval
- n Lacked adequate support because of economic stress, divorce, death or multiple siblings

Specific Disorders

Hyperthyroidism

psychosomatic factors

- n They strive toward premature self-sufficiency and tend to dominate others with smothering attention and affection
- n They build defenses against a repetition of the unbearable feelings of rejection and isolation that occurred in childhood

Specific Disorders

Hyperthyroidism

Treatment

- n Antithyroid medication
- n Tranquilizers
- n Supportive psychotherapy
- n Crisis intervention may be helpful at the onset of the disease

Specific Disorders

Diabetes mellitus

Disorder of metabolism and of the vascular system manifested by a disturbance of the body's handling of glucose, lipid, and protein

Specific Disorders

Diabetes mellitus---etiology

- n Heredity and family history are important in the onset
- n Sudden onset is associated with emotional stress, which disturbs the homeostatic balance
- n Provoking feelings of frustration, loneliness, and dejection

Specific Disorders

Diabetes mellitus

Treatment

- n Supportive psychotherapy
- n Encourage patients to lead as normal a life as possible, with the recognition that they have a chronic but manageable disease