PSYCHODERMATOLOGY

Psycho dermatology

- Psychiatry focuses on the “ internal and invisible ”
- Dermatology on the “ external, visible”
- Interface between psychiatry and dermatology
- Both derived from ectoderm, may influence each other
- In more than one third dermatology patients, effective treatment requires psychiatric involvement

Introduction

- Basically classified into dermatological conditions with psychiatric symptoms

and

- Psychiatric illness in which the skin is the target of disordered thinking, behaviour or perception.
- Cutaneous manifestation of psychotropics

Classification – DSM IV TR

I. Psychological factors affecting medical conditions

- Atopic Dermatitis
- Psoriasis
- Alopecia Areata
- Urticaria, Angioedema
- Acne Vulgaris
- Others

Classification...

II. Undifferentiated somatoform disorder

- Chronic Idiopathic Pruritis
- Body Dysmorphic Disorder

III. Pain disorder

- Idiopathic Glossodynia
- Essential Vulvodynia

Classification...

IV. Delusional Disorder, Somatic type

- Delusions of parasitosis
- Delusions of a foul body odour

Classification....

V. Impulse control disorders (OCD spectrum)

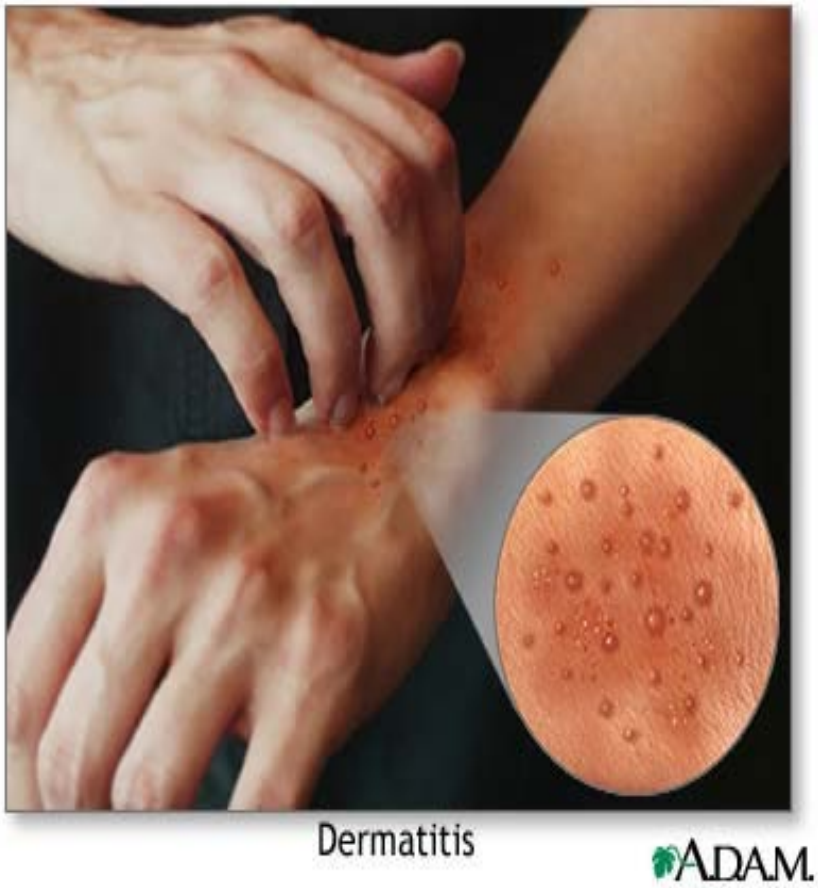
- Psychogenic Excoriation
- Onychophagia
- Trichotillomania

VI. Factitious Disorder

- Factitious Dermatitis
- Psychogenic Purpura

Ia - Atopic Dermatitis

- Chronic skin disorder with persisting and relapsing course, characterized by pruritis and eczema
- Starts by childhood/ adolescence
- Common condition with a 10% prevalence, 1.2 - 1
- Increased prevalence in recent times - reasons



Atopic Dermatitis - Causes

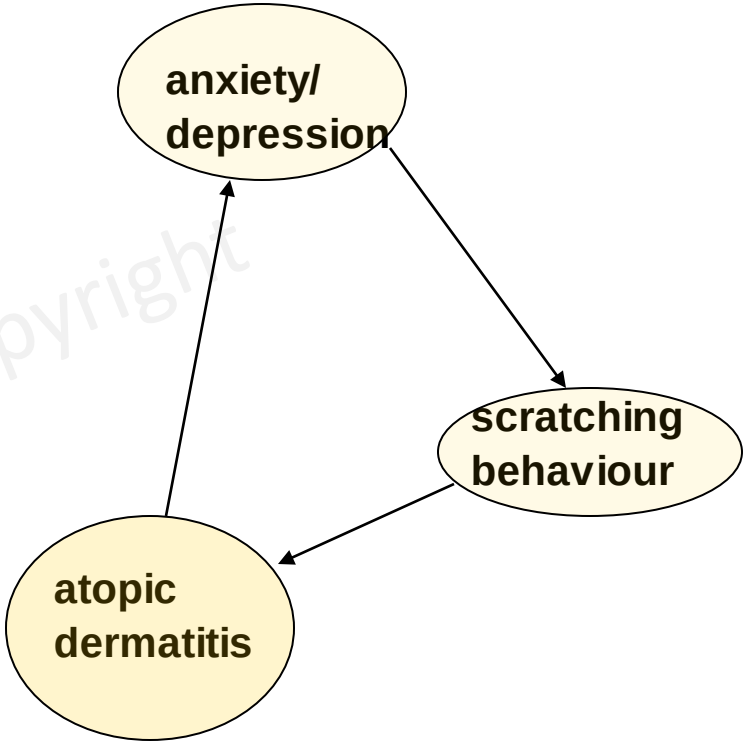
- Genetic influence – family and twin studies
- Increased IgE production, defective cell mediated immunity are heritable factors
- Abnormal histamine release by mast cells and basophils, probably due to substance P released by cutaneous nerves

Atopic Dermatitis - Triggers

- Environmental – aeroallergens, food, pollen
- Stressful life events – can precede onset and exacerbations
- Stress ----- CRH release ---- pro inflammatory actions ----- activates mast cells ---- release of mediators

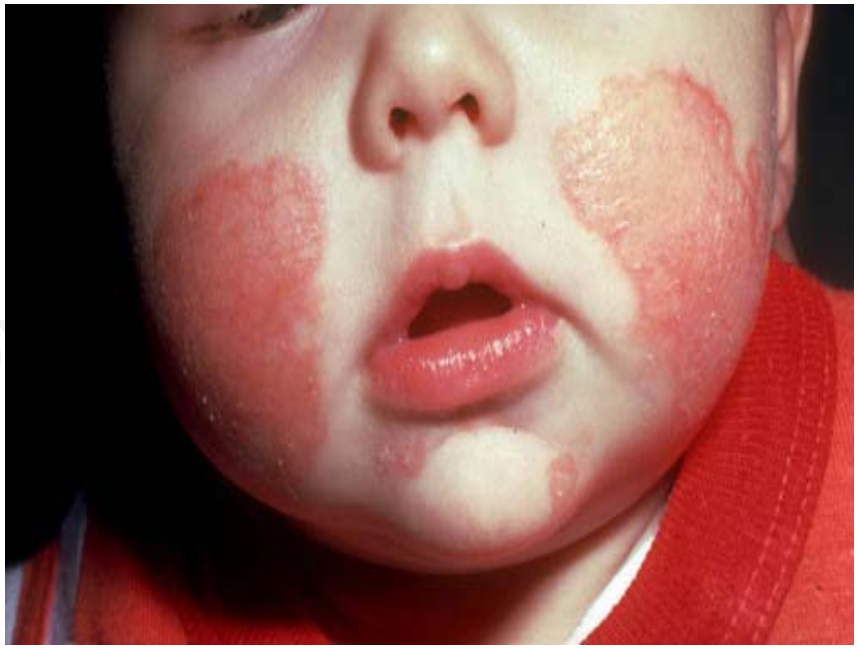
Atopic Dermatitis - Psychological aspects

- Adult AD patients are more anxious and depressed than control groups
- Depressive symptoms amplify itch perception



Atopic Dermatitis in children

- Parental responses of attention / physical contact worsens scratching
- Severe AD has one third morbidity in behavioural symptoms
- Emotional state related to severity of the illness.



Psychiatric intervention - Scope

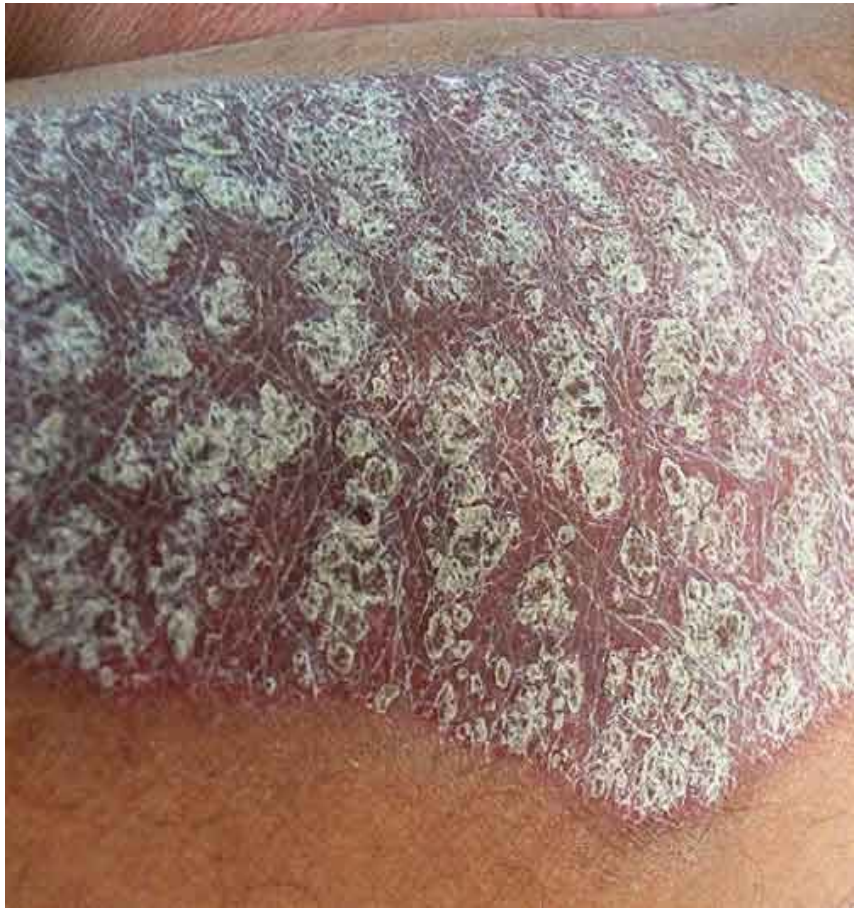
- Ideally recommended in all patients with mod – severe disease
- Aim – improve QOL, interrupt the itch – scratch cycle
- Relaxation training, Stress management techniques
- Habit reversal training
- Cognitive behavioural techniques

Drug therapy

- Topical doxepin 5%, reduces pruritis due to histamine antagonist action
- Trimipramine at 50mg/ day, decreases sleep fragmentation, reduces time spent in stage 1 sleep, which reduces scratching during the night.

Ib - Psoriasis

- Chronic relapsing skin disease
- Clear cut borders and silvery scales
- Prevalence 1 – 2 %, equal in both genders
- Onset usually in 3rd decade
- Lifelong course with unpredictable exacerbations



Psoriasis - Causes

- Genetic predisposition – HLA loci
- Triggers - External- cold weather, trauma, infections, stress
- Drug related – beta blockers, steroid withdrawal
- Lithium induced psoriasis - occurs within the first few years of treatment, resolves after discontinuation of treatment.

Stress and Psoriasis

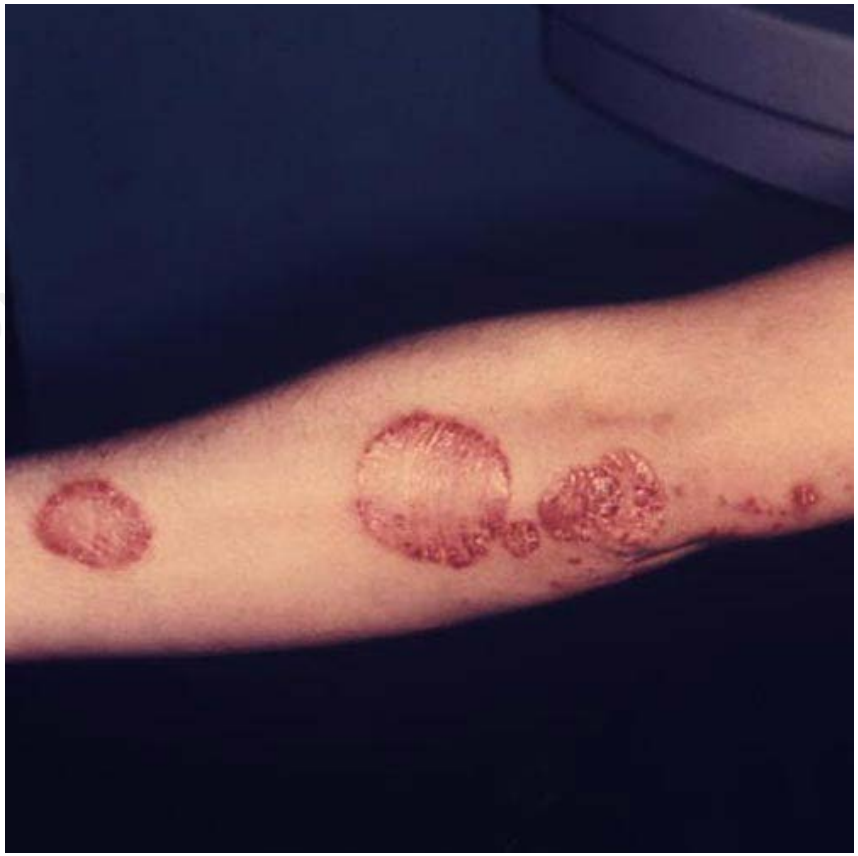
- Vicious cycle between psoriasis and stress
- Is a trigger in up to 80% recurrence
- Stress----- release of neuropeptides from cutaneous nerves ----- inflammatory response.
- The predictors of disability are anticipation of social stigma, perception of health and depression

Psoriasis – Psychological aspects

- High levels of anxiety and depression
- Depression correlates with patient's disease perception, increases itch perception, worsens treatment outcome
- Wide array of co morbid personality disorders – schizoid, avoidant, compulsive, passive – aggressive - ? more stress
- Heavy alcohol drinking (>80g/day) is a poor outcome predictor

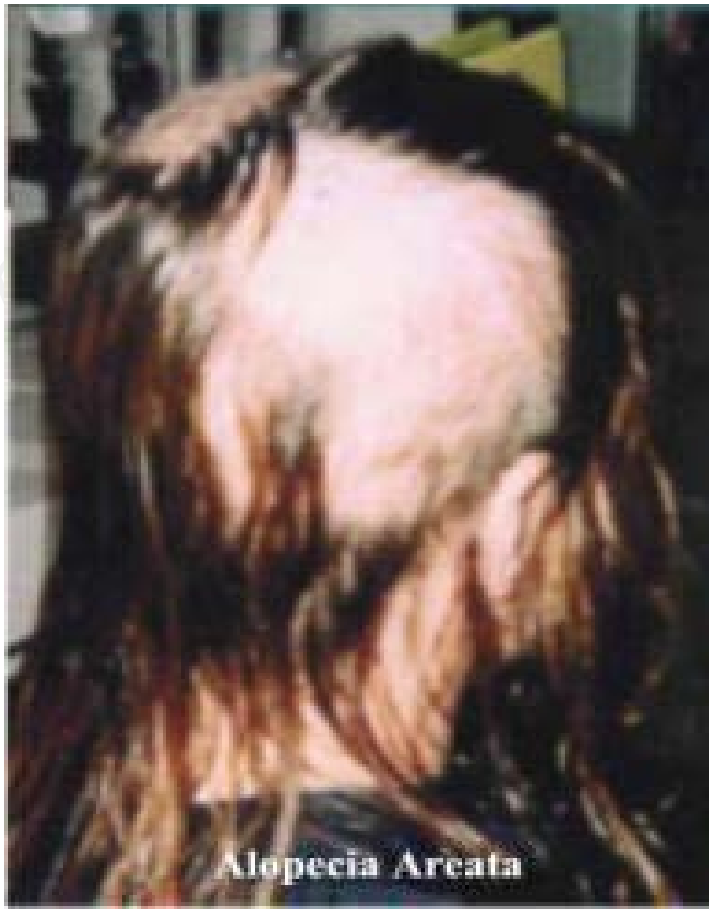
Scope of psychiatric management

- Ideally a part of treatment in all.
- Meditation, hypnosis, relaxation, stress management have reduced activity of psoriasis
- No studies to determine if pharmacological management of psychiatric co morbidity reduces disease activity



Ic - Alopecia Areata

- Non scarring patchy hair loss - scalp, facial and body hair, varies from single patch – complete hair loss
- Incidence is 2% among derm OP, equal prevalence in both sexes
- Peaks 20 – 50 years



Alopecia Areata - Causes

- Prognosis – 30% may never recover, 30% completely recover
- Autoimmune cause is suspected with probable T cell dysfunction and because of response to immunosuppressant
- Conflict about role of stress in causation
- Substance P, CRH – links between stress and skin

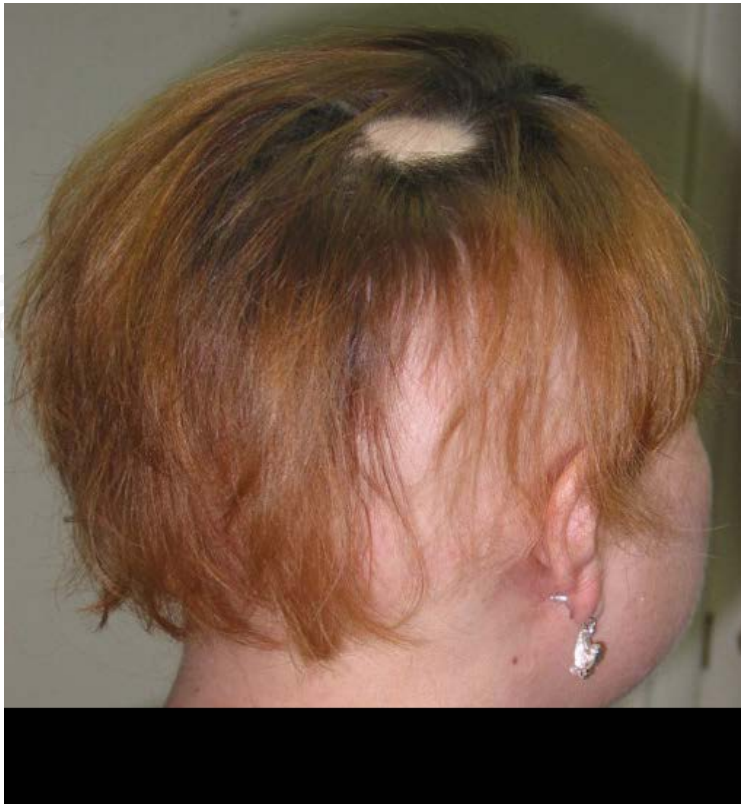
Alopecia – Psychological Aspects

- Stressful events are more common in the six months prior to alopecia onset vs. controls

- Uncontrolled studies – greater prevalence of major depression, anxiety and paranoid disorder in adults and in kids

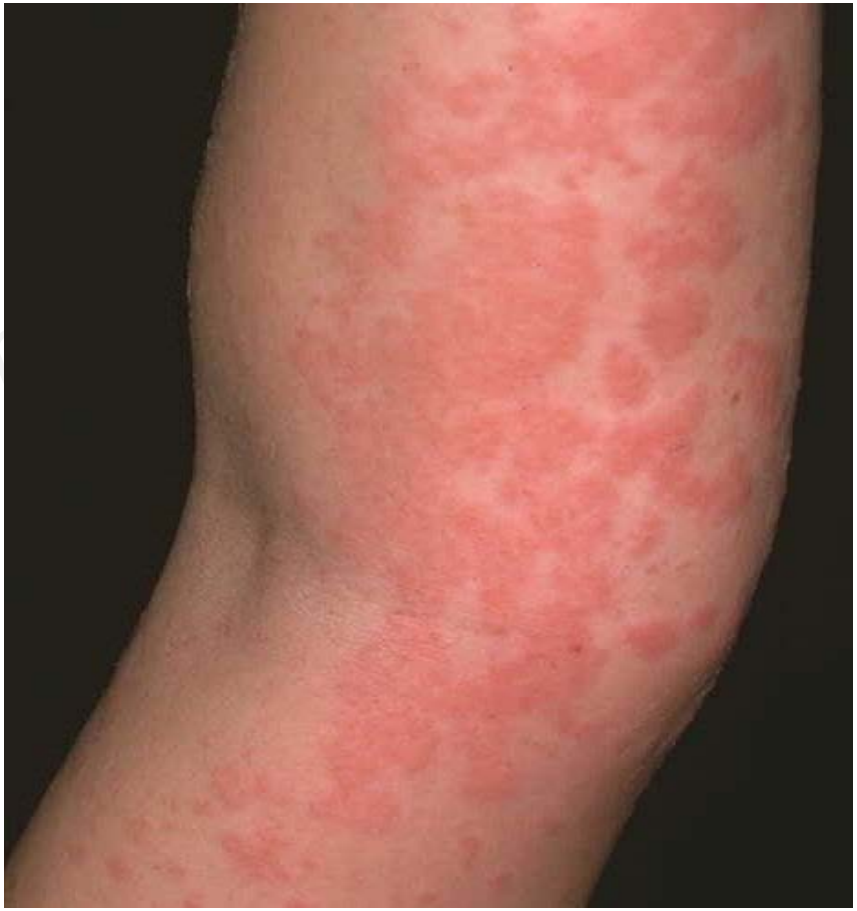
Alopecia - Management

- Patients on Imipramine (75 mg/ day) had more hair growth than placebo controls
- Effect independent of reduction in anxiety or depression
- SSRIs are promising for treatment of alopecia and co morbid neurosis
- Improvement with relaxation training – more studies



Id - Urticaria and Angioedema

- Urticaria – circumscribed, raised, erythematous, pruritic areas
- Urticaria involves the superficial dermis, while angioedema extends deeper
- 15 – 20% prevalence, more common in women, peak ages 20-40y
- Mostly resolves within 6 weeks, which lasts longer is chronic urticartia, responds poorly to treatment, lasts many years in about 20%



Urticaria - Causes

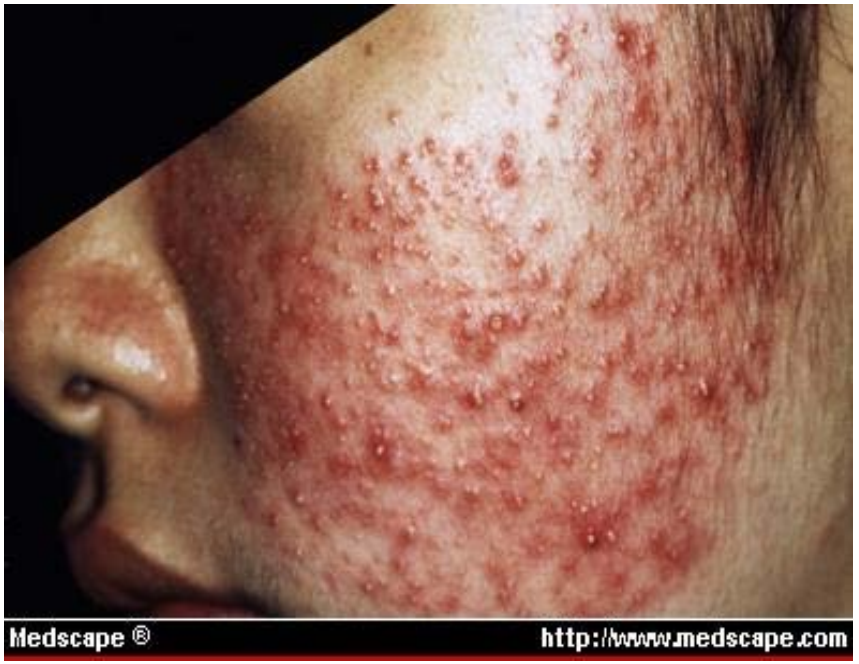
- Occurs due to vasoactive mediators in the skin
- Probable autoimmune causation, prescence of anti IgE antibodies, C1 esterase inhibitor deficiency
- Emotional stress ----- increased adrenaline and Nor adrenaline ----- Halo hives, respond to Propranolol

Urticaria – Psychological Aspects

- Increased levels of depression and anxiety
- Depression worsens itch perception
- Doxepin at low doses, Nortryptilline have effect on the pruritis - ? due to antihistamine activity or central effects
- SSRIs have been found promising in one study
- Hypnosis with relaxation reduces the pruritis in a controlled study

Ie - Acne Vulgaris

- Scarring disease of sebaceous glands
- Starts in teenage, more common and severe in men
- Course usually self limited, women more likely to have persistence



Acne Vulgaris – Psychological Aspects

- Stress ---- relaese of adrenal steroids ---- increases sebum production ---- acne is worsened
- Positive association exists between acne severity, negative self image and anxiety
- Affects quality of life substantially with socio occupational dysfunction

Acne Vulgaris - Management

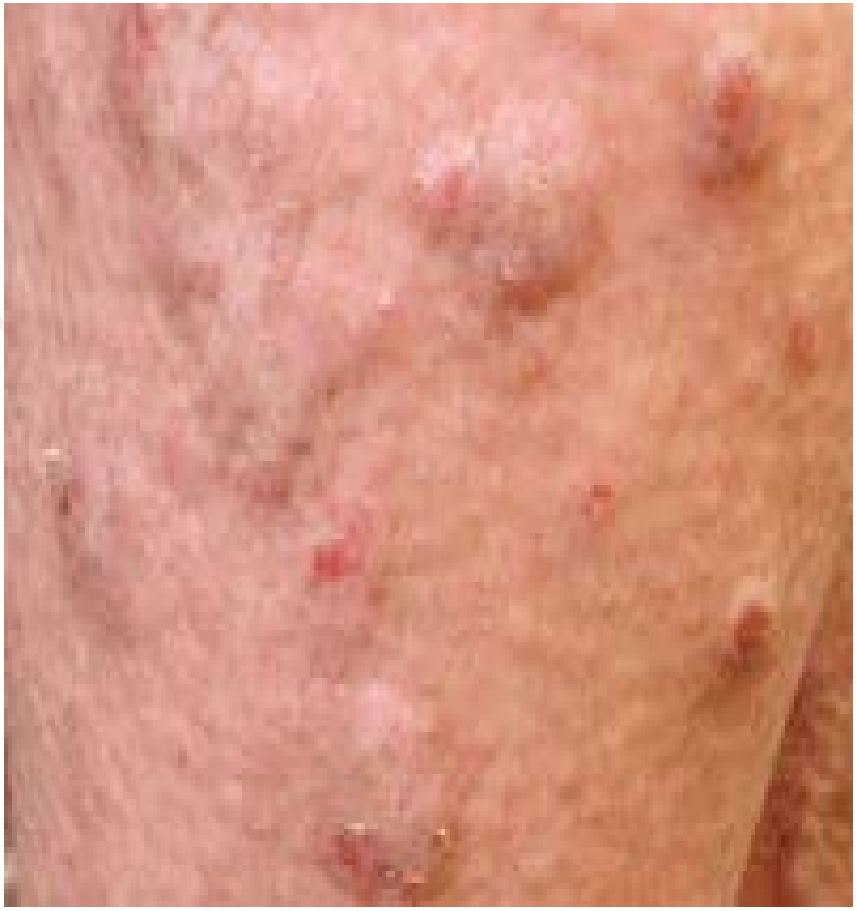
- Paroxetine to treat co morbid depression reduces acne also
- Adjunctive psychological treatment with relaxation and cognitive imagery treatment has better results than medical treatment alone

Isotretinoin and depression/suicide

- Successful treatment of acne with Isotretinoin improves patient self image, clears depression and anxiety
- Though some case reports mention some association no evidence links the above.
- Important to counsel patients about this possibility prior to treatment and to monitor carefully.

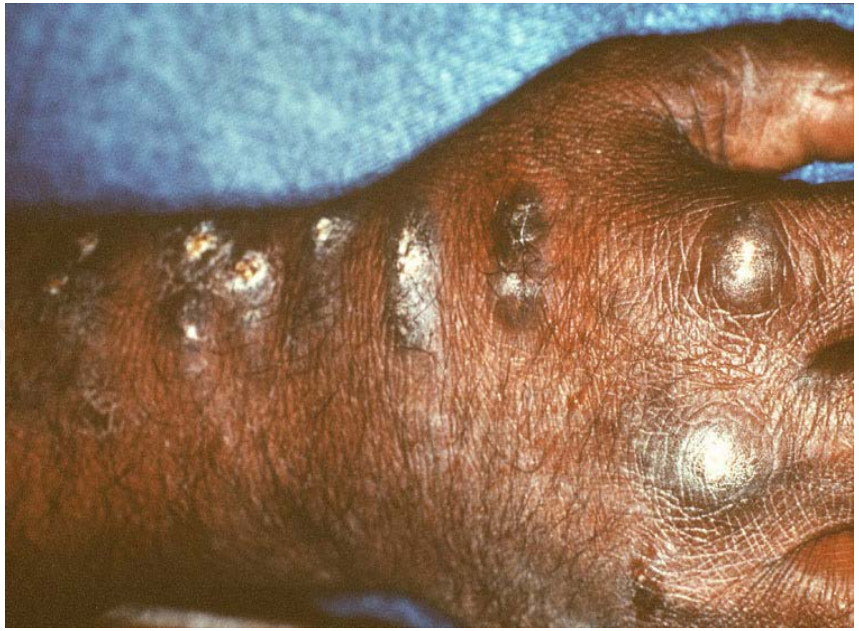
Prurigo Nodularis

- Prurigo nodularis is characterized by very itchy firm lumps.
- Mainly in adults aged 20-60 years, equal gender distribution.
- Idiopathic causation
  Up to 80% of patients have a personal or family history of atopic dermatitis



Prurigo Nodularis - Management

- Anxiety, depression common
- Condition chronic, resistant to trt
- Doxepin has use as antidepressant, histamine antagonist
- SSRIs combination with derm treatment



Dermatological conditions with possible stress etiology

- Rosacea
- Telogen Defluvium
- Primary Hyperhydrosis
- Seborrheic Dermatitis

II - Somatoform disorders

- Somatoform disorders – physical symptoms suggesting a physical disorder for which there are no demonstrable organic findings or physiological mechanisms, and for which there is a strong evidence/ presumption that the symptoms are linked to psychological factors or conflicts.

II - Chronic Idiopathic Pruritis

- Pruritis is most common symptom of skin disorders
- Psychiatric factors can affect itch

1. Decreases itch threshold, prolongs severity and duration
2. CRH elevation ----- CNS opiate ----- enhance itch
3. Stress ---- substance P ---- itching

Chronic Idiopathic Pruritis - Management

- Tricyclic antidepressants can relieve pruritis
- Behavioral treatment – habit reversal training and CBT, can interrupt the itch scratch cycle and prevent complications of continuous itching

Body Dysmorphic Disorder

- Body Dysmorphic Disorder – preoccupation with an imagined defect in appearance
- 12% of dermatology, 1-2 % of general population
- Onset in adolescence, young adults
- Poor QOL, high rates of depression, suicidal ideation
- Responds to treatment with SSRIs, CBT
- Augmentation with antipsychotic may help

III – Pain Disorders

- Glossodynia
- Vulvodynia

IVa - Delusional Disorder, Somatic Type

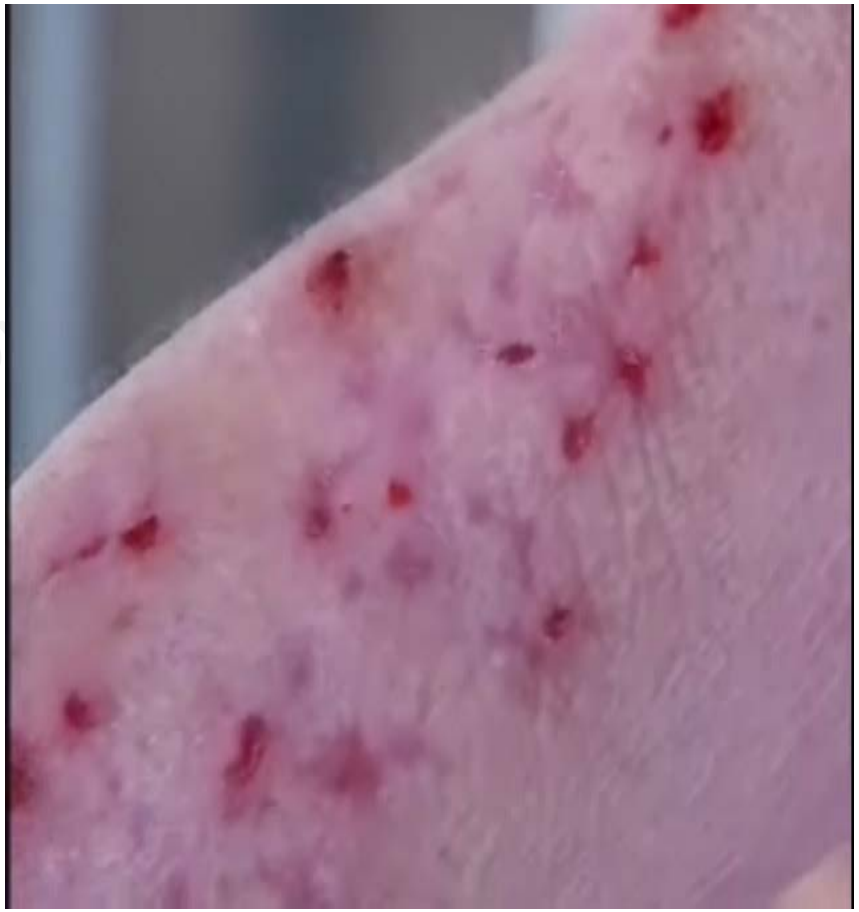
- Delusions of Parasitosis – fixed belief that one is infested with living organisms despite a lack of medical evidence
- Perceptual abnormalities common
- Associated with many medical disorders
- Can be a part of some psychiatric conditions
- Drug related causation possible – amphetamines, cocaine, steroids

Delusional Parasitosis – OC Symptoms?

- Distressing, anxiety provoking, recurrent thoughts regarding infestation which are difficult to control
- Repetitive behaviour like washing, cleaning, skin excoriation, use of insect repellants may be present

Delusional Parasitosis – Psychological Aspects

- Specific precipitant ----- history of potential/ actual exposure to contagious organisms ---- repeated consultations
- Socio occupational dysfunction can result due to the preoccupation



Delusional Parasitosis - Management

- One controlled study on potency of Pimozide for 6 weeks to 5 months, 50% potency. Uncontrolled reports of efficacy with other antipsychotics
- No evidence that Pimozide is superior
- Case reports of successful treatment with Naloxone, Naltrexone, SSRI, ECT, TCAs
- Behaviour therapy may have a role due to OC characteristics.

IV - Other Delusional Disorders, Somatic Type

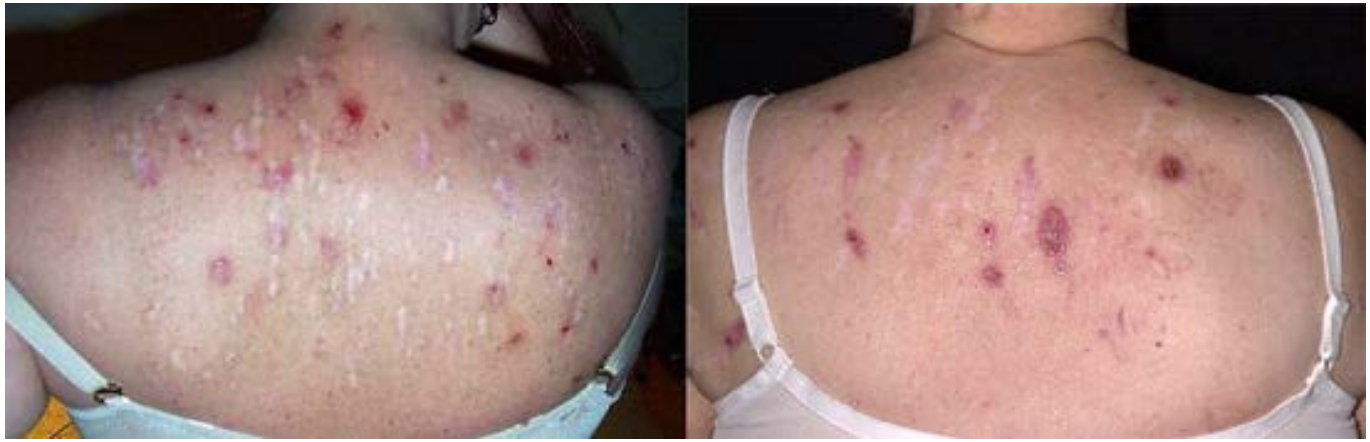
- Delusion of foul body odour – encapsulated somatic delusion
- Treatment data are limited, possible efficacy for Pimozide and other antipsychotics

VI - Obsessive Compulsive Spectrum Disorders

- A – Psychogenic Excoriation
- B – Onychophagia
- C – Trichotillomania

VIa – Obsessive Compulsive Spectrum Disorders

- Psychogenic Excoriation – excessive scratching/ picking of normal skin/ mild surface irregularities
- Lesions in areas patient can easily reach
- Incidence of 2 % among dermatology OP
- More in women, 30 – 45 years at onset, duration 5 yrs



Psychogenic Excoriation

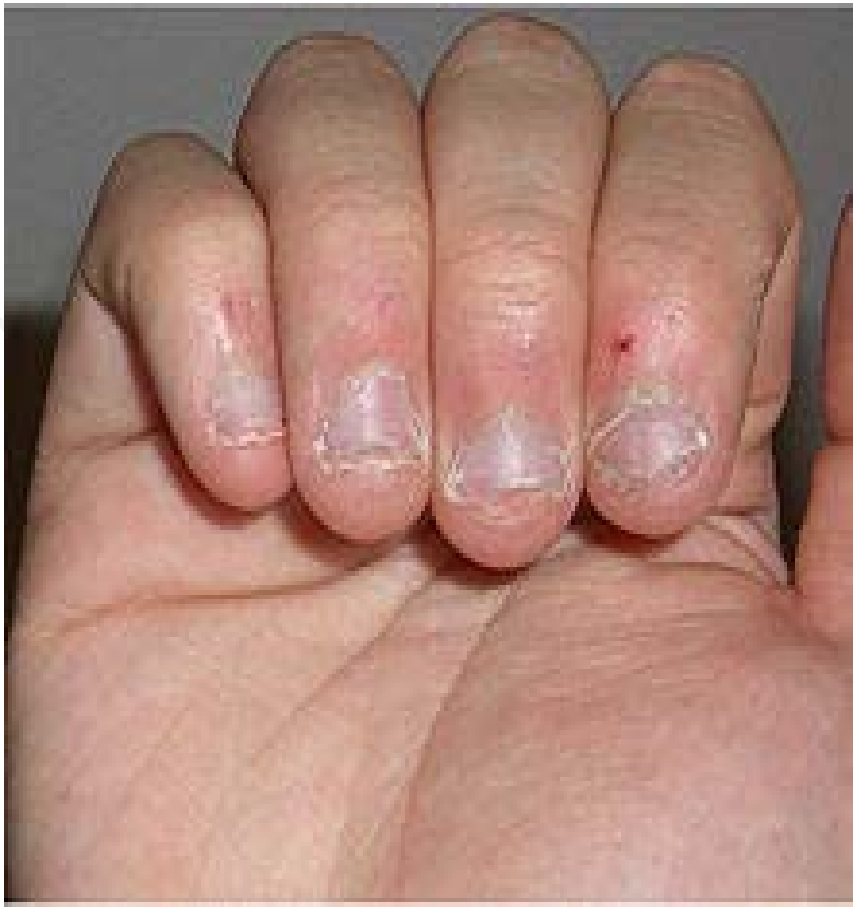
- Repetitive, ritualistic, tension reducing behaviour
- Increase intension before and transient relief after
- Obsessions about skin smoothness, presence of dermal irregularities also present
- Behaviour spans a compulsivity – impulsivity spectrum

Psychogenic Excoriation – Management

- Open trials of successful treatment with SSRIs, Doxepin
- Case reports of treatment with olanzapine, pimozide, naltrexone
- Behavioural treatment shows good results in case reports

VIc - OC Spectrum Disorders - Onychophagia

- Repetitive nail biting
- Variant is onychotillomania
- Peak between 10 – 18 years
- Preferential response to clomipramine over desipramine
- Behaviour Therapy including habit reversal is useful

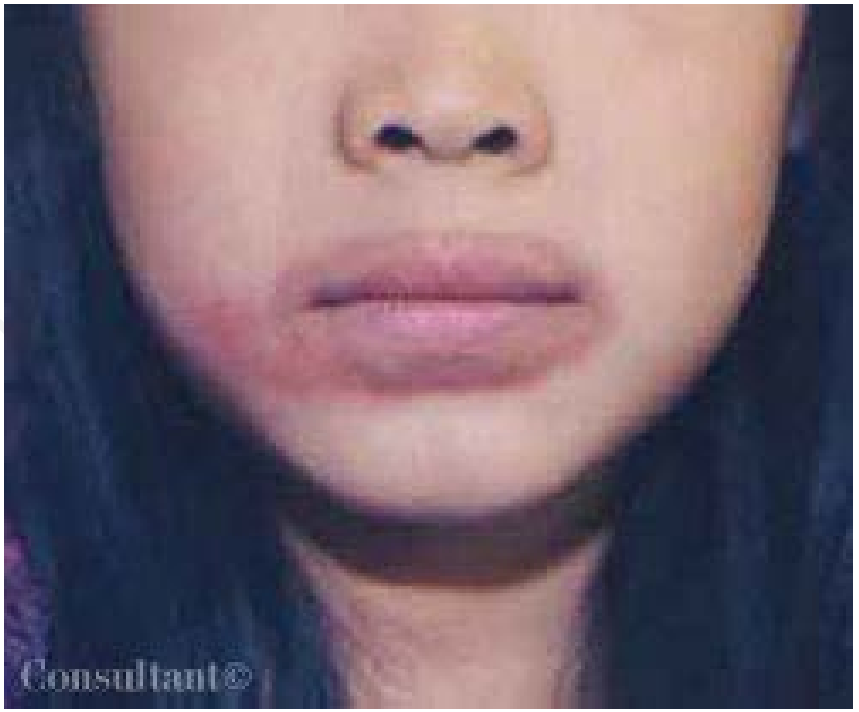


VI – Factitious Disorders

- A – Factitious Dermatitis/ Dermatitis Artefacta
- B – Psychogenic Purpura

VIa Factitious Dermatitis

- Patients intentionally produce skin lesions to assume the sick role
- Occurs in about 0.3% dermatology patients
- Female to male is around 3 – 8 is to 1
- Greatest frequency is in adolescents and young adults
- 30% develop a chronic illness

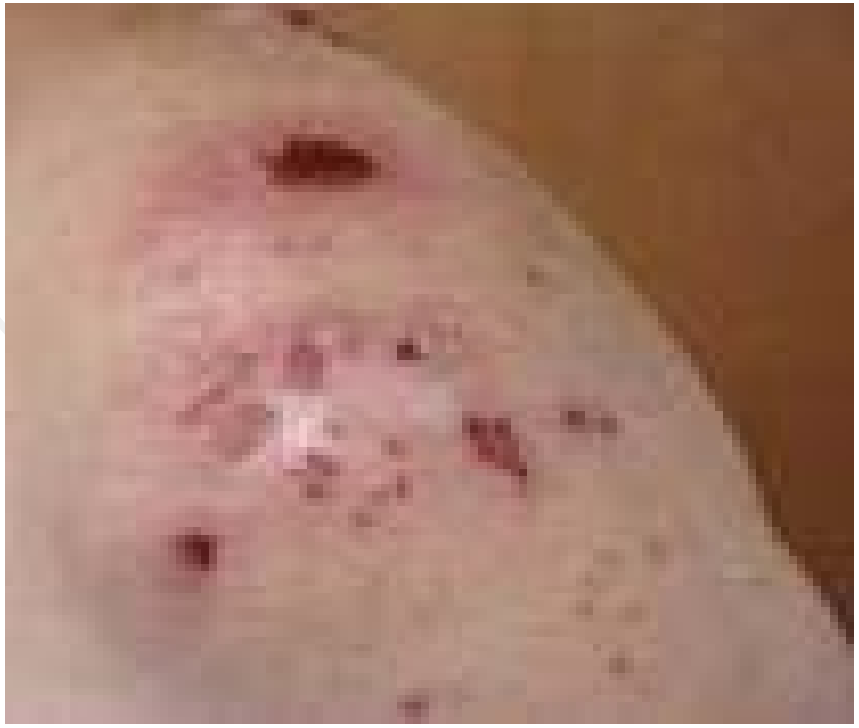


Diagnosis – Factitious Dermatitis

- Affected sites are more accessible, more on one side of the body
- Sharp geometric borders
- Natural progression of lesions not evident
- History is vague
- Suggestibility to next site of lesion
- Occlusive dressing halts progression

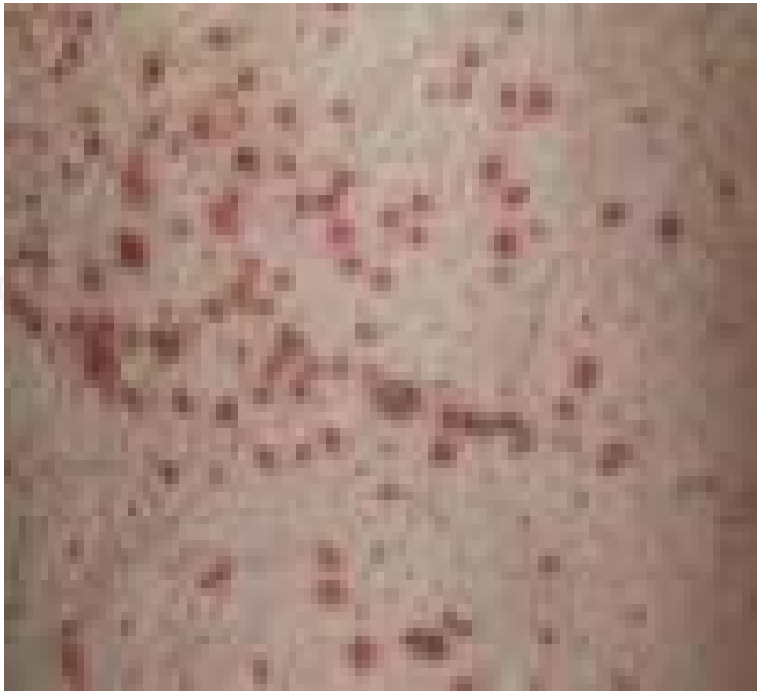
Factitious Dermatitis - Psychological Aspects

- Onset common after severe stressor
- Co morbid borderline disorder common
- D/D – depressive/psychotic/ MR SIB
- Patients may refuse psychiatric referral
- Rx- empathetic therapeutic relationship



VIb – Psychogenic Purpura

- Spontaneous appearance of purpura, usually after injury/ surgery
- Coagulation tests are normal, no auto antibodies
- Mostly women in reproductive age group



Psychogenic Purpura

- Cause - idiopathic. Hypothesis about auto erythrocyte sensitization
- Possible psychogenic cause due to:

1. Previous stressors often present
2. Other unexplained somatic symptoms
3. Significant co morbid psychiatric symptoms

Cutaneous Side Effects of Psychiatric Medications

Anticonvulsants	Allergic rashes, alopecia, Steven – Johnson syndrome, toxic epidermal necrolysis, lupus like syndrome
Antidepressants	Allergic rashes, phototsensitivity(TCAs), hyperhydrosis

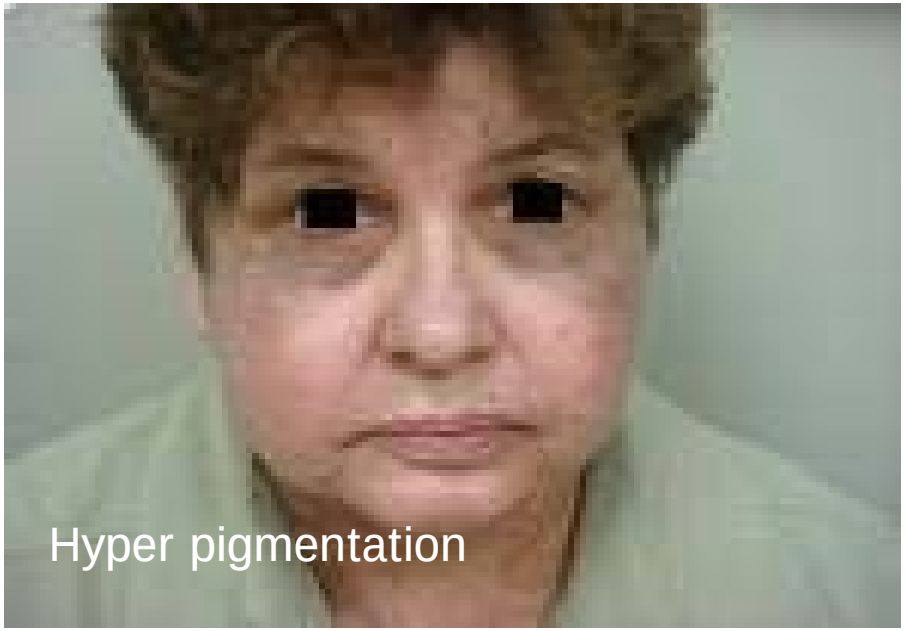
Cutaneous Side Effects of Psychiatric Medications

Antipsychotics	Skin pigmentation (tz, cpz) Photosensitivity (phenotz) Lupus like syndrome (phenotz) Contact dermatitis, injection site reactions
Lithium	Urticaria, rash, alopecia, folliculitis, acne exacerbation, warts, psoriasis


CBZ Rash
Medscape ®
http://www.medscape.com


Steven Johnson


Photosensitivity


Hyper pigmentation

Conclusions - Liaison

- Best managed when psychiatrist and dermatologist collaborate
- Availability of psychiatrist as a part of the team improves patient acceptability
- Lack of such facilities necessitates dermatologist dealing with stress management and starting psychotropic medication

Conclusions

- Skin disorders with psychiatric co morbidities tend to be chronic, disfiguring
- Cause – response question needs to be answered, whether the anxiety/ depression is a precipitant, co morbidity or a result
- Psychosocial aspect of these conditions falls in our domain

Conclusions - Classification

- Delusion or obsession question exists about delusional parasitosis
- Impulse control disorder or OCD dilemma about psychogenic excoriation, trichotillomania, onychophagia
- Nature of psychogenic purpura not well established as a psychiatric disorder

Conclusions – Evidence Base

- More studies to investigate the link between stressors and dermatological conditions
- Psychoneuroimmunoendocrine interactions and pathology needs to be better understood
- Well controlled studies on treatment of these conditions are needed
- Non Pharmacological techniques need to be evaluated further

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