CASE CONFERENCE

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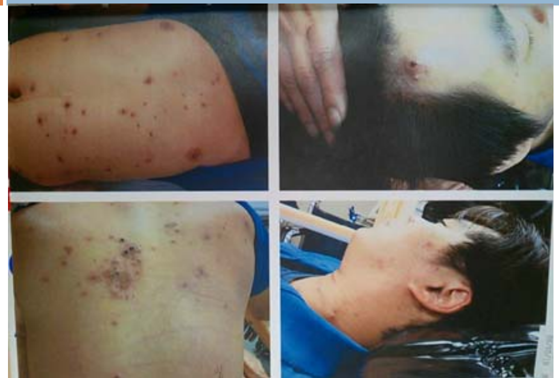
指導者: 吳柏衡醫師
102.02.18

Basic Data

- Age: 35 yrs
- Sex: male
- Date of visiting ER: day1
- Vital sign
  - 36.4/106/18 BP: 121/63 mmHg

day1 ER

- Chief complaint
  - Skin rash for one month
- Present Illness
  - Multiple skin rash with itchy sensation
  - No fever
  - Chills
  - Allergy: denied
  - No travel history



- 當你遇到一個skin rash 病人時 你要問什麼?
  - 請講出常見有skin rash的疾病
- PE 要注意那些細節?
- 什麼時候你會做進一步檢查?

- What is your impression in this patient?
- What would you do next?

Something about Rash

- Defined morphology and location.

  -- Morphology of the rash is usually distinct and related to the pathophysiologic dysfunction of the skin .

  -- The involvement of palms, soles, and mucous membrane is of key importance

  -- Dysphasia, as well as eye or genital irritation, may be a manifestation of as mucosal involvement.

  -- Rash's rapidity of progression is also an essential in diagnosis

BOX 191.1 Distribution and Progression of a Rash

Distribution and Spread
Begin peripherally, then spread centrally
- Rocky Mountain spotted fever
- Erythema multiforme
- Vasculitides

Begin centrally, then spread peripherally
- Viral exanthems
- Smallpox

Involvement of Palms and Soles
Diffuse involvement (more serious and lethal)
- Rocky Mountain spotted fever
- Erythema multiforme
- Stevens-Johnson syndrome
- Toxic epidermal necrolysis
- Syphilis
- Bacteremic endocarditis

Localized involvement
- Contact dermatitis
- Infectious process

Involvement of Mucous Membranes
Toxic epidermal necrolysis
Stevens-Johnson syndrome
Pemphigus vulgaris
Kawasaki disease
Viral syndromes

Rapidity of Rash Progression
Spread in minutes
- Urticarial anaphylaxis

Spread in hours
- Meningococcemia

Spread in days
- Drug reactions

PHYSICAL EXAMINATION TIPS

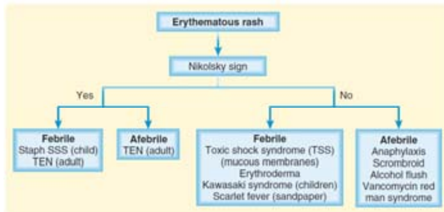
- Evaluation of vital signs is essential. Fever and hypotension, in particular, are ominous
  findings that mandate expedited and intensive care.
- New-onset heart murmur or nuchal rigidity
- Generalized lymphadenopathy (present with many illnesses, including mononucleosis,
  HIV infection, other infections, serum sickness, and drug reactions.)
- **Exposure**:
  -- back, buttocks, and perineum !
  -- Toenails should be inspected closely for signs of systemic disease or fungal infection
- Additionally, the fingers, toes, palms, and soles should be examined closely for the distribution of the rash and stigmata of endocarditis.

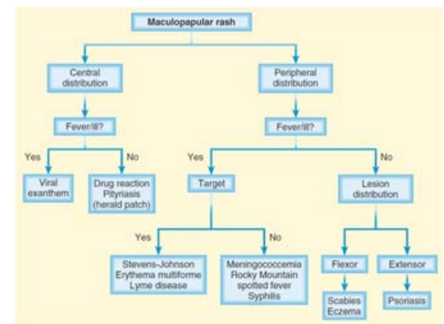
SPECIFIC SIGNS

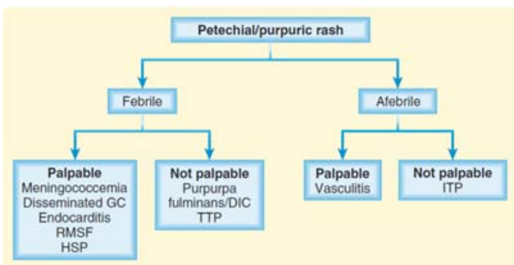
- **Nikolsky sign**
  Slight rubbing of the skin results in exfoliation of the outermost layer
  with lateral extension of the erosion into the intact skin
- **Asboe-Hansen sign (indirect Nikolsky sign)**
  extension of a blister into normal skin with the application of light
  pressure on the top of the blister

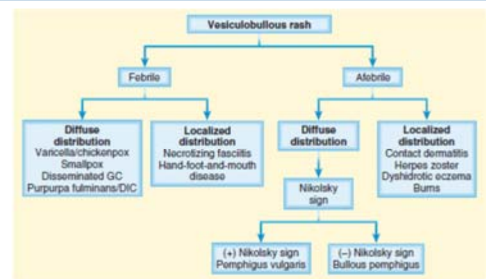
**All patients with tender, blistering, or sloughing skin should be evaluated serially for these important signs.

- Inquiry regarding the patient's travel, medical, occupational, recreational, and medicinal history is required.
- The differential diagnoses can be narrowed by categorizing the rash as erythematous, maculopapular, petechial/purpuric, or vesiculobullous.









RED FLAGS

Fever and petechiae/purpura
Mucous membrane involvement
Hemorrhagic bullae
Nikolsky sign
Nonpalpable petechiae with neurologic symptoms

- Lab data
  - WBC 19.1K, Seg 28%, Lym 15.5%, Eosinophil 51%
  - CRP 1.56
- Impression
  - Allergic reaction, multiple vesicular lesion
- Plan
  - Discharge with Dermatology OPD appointment

day2 ER二次回診

- Vital sign
  - 36/93/18 BP: 137/96 mmHg
- Chief complaint
  - Headache

- 有關Headache, History taking你會問什麼?
- PE 你要注意什麼?

HEADACHE

- Primary Headache
  - 90%
  - migraine, cluster, and tension-type headaches
- *Secondary* headace
  - Symptom of underlying disease

BOX 101-1 INTERNATIONAL HEADACHE SOCIETY CLASSIFICATION OF HEADACHE

1. Migraine
2. Tension-type headache
3. Cluster headache and trigeminal autonomic cephalgias
4. Other primary headaches
5. Headache attributed to head and/or neck trauma
6. Headache attributed to nonvascular intracranial disorder
7. Headache associated with nonvascular intracranial disorder
8. Headache attributed to a substance or its withdrawal
9. Headache associated with noncephalic infection
10. Headache attributed to disorder of homeostasis
11. Headache or facial pain attributed to disorder of cranium, neck, eyes, ears, nose, sinuses, teeth, mouth, or other facial or cranial structures
12. Headache attributed to psychiatric disorder
13. Cranial neuralgias and central causes of facial pain
14. Other headache, cranial neuralgia, central or primary facial pain

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Migrane

BOX 101-3 MIGRAINE WITH AURA (CLASSIC MIGRAINE): INTERNATIONAL HEADACHE SOCIETY CRITERIA

A. At least two attacks that fulfill criterion B
B. Presence of at least three of the following four characteristics for a diagnosis of classic migraine:
   1. One or more fully reversible aura symptoms indicating focal cerebral cortical or brainstem dysfunction (or both)
   2. At least one aura symptom developing gradually over more than 4 minutes, or two or more symptoms occurring in succession
   3. No single aura symptom lasting longer than 60 minutes
   4. Headache beginning *during* aura or *afterward*, with a symptom-free interval of less than 60 minutes (also may begin *before* aura)
C. Exclusion of related organic diseases by means of an appropriate history, physical examination, and neurologic examination with appropriate diagnostic tests

BOX 101-2 **MIGRAINE WITHOUT AURA (COMMON MIGRAINE): INTERNATIONAL HEADACHE SOCIETY CRITERIA**

A. At least five attacks fulfilling criteria in B, C, D, and E
B. Attack lasts 4 to 72 hours (untreated or unsuccessfully treated)
C. Headache has at least two of the following characteristics:
   1. Unilateral location
   2. Pulsating quality
   3. Moderate to severe pain intensity
   4. Aggravation by or causing avoidance of routine physical activity (e.g., walking or climbing stairs)
D. During headache, at least one of the following:
   1. Nausea or vomiting (or both)
   2. Photophobia and phonophobia
E. Not attributable to another disorder

Tension headache

- Typically do not cause significant disability, and patients are able to continue with their normal daily activities.
- Stress and lack of sleep are implicated as triggering factors.
- Not worsen with physical activity.
- Average duration of the headache is 4 to 13 hours, with a maximum of 72 hours.
- Patients typically complain of a tight, bandlike discomfort around the head that is nonpulsating and dull .
- May experience tightening of the neck muscles
- Accompanying symptoms such as nausea, vomiting, phonophobia, or photophobia are unusual.
- Anxiety and depression may coexist with chronic tension headache
- Physical examination will reveal tender areas of the scalp and neck with both tension and migraine headaches.

Cluster Headache

- Only headache syndrome that is more common in men than in women
- Young to middle-aged adults who smoke, with a peak incidence in the late 20s
- Occur repeatedly over a defined time interval
- Several attacks can occur in 1 day, and a typical cluster period may last 6 to 8 weeks
- Precipitating factors : most notably the ingestion of alcohol, Stress and climatic changes .
- Each headache lasts from a few minutes up to 2 hours .
- Typically begins with a unilateral sharp, stabbing pain in the eye, which may awaken the patient

  from sleep.
- Predictable fashion (i.e., holding a hand to the affected eye, rocking, rubbing the head, and pacing
- The attack subsides rapidly, often leaving the patient exhausted.
- The eye often is injected and tearing, and many patients have unilateral nasal congestion

Secondary headache

- SAH, ICH
- Brain tumor
- Temporal arteritis
- Coratid or VA dissection
- Idiopathic IICP
- Acute glaucoma
- Intracranial infection: meningitis, abscess …
- Trigeminal neuralgia

Other Cause

- **High-Altitude Headache**
- **Hypertensive Headache**
- **Medication-Induced Headache**
- **Cervicogenic Headache**
- **Post–Dural Puncture Headache**
- **Post-traumatic Headache**

Red Flag signs

- Sudden explosive headache; first or “worst-ever” headache;
- New-onset headache after age 50 years
- Headache associated with papilledema, alteration in or loss of consciousness, or focal neurologic symptoms
- Headache after head trauma
- Subacute headache with increasing frequency or severity
- Headache associated with fever, cancer, or immunosuppression;
- Headache triggered by exertion, sexual activity, or Valsalva maneuver

我們的病人....

- Present Illness
  - Fever (+) yesterday
  - No nausea/ vomiting
  - Vesicles on left abdomen, two months ago, disseminated to scalp, four limbs and trunk
  - Itching and pain lesions
  - Dizziness and unstable gait
  - 頭後腦裡面在痛, 意識會昏沉, 平衡感會不好, 看東西會霧霧的

- 結合這兩次來診, what is your impression?
- What would you do next?

Rash+fever+ ne

- ~~Lyme diseas~~
- ~~Syphilis(terti~~
- ~~Meningococc~~
- ~~RMSF~~
- ~~Smallpox / Variola~~
- Disseminated herpes simplex

沒旅遊史,向心非離心

- Impression
  - Suspect Herpes CNS infection

- Brain CT

day2 CSF study

CSF	**********	
Color	Colorless	
Appearance	Clear	
Pandy's test	+	
RBC	6	x10/9ul
WBC	8	x10/9ul
L:N	8:0	

Glucose	71	mg/dL
Total-protein	47.0	mg/dL

Gram(+) Cocci	Not Found
Gram(+) Bacilli	Not Found
Gram(-) Cocci	Not Found
Gram(-) Bacilli	Not Found
Yeast	Not Found
Fungi	Not Found
India ink	Not found
Latex Crypt Ag	Negative

Initial pressure: 29.5 cm H2O
End pressure: 24.5 cm H2O

day2 21:56

- Right hearing decrease
- No headache, No N/V, No delusion, No focal weakness/numbness
- ENT consultation
  - PTA : WNL
  - Keep Acyclovir, may add topical use

day3 01:57

- Focal seizure attacked, consciousness clear 01:57~02:02
- Neurologist consultation
  - Herpes encephalitis, simple partial seizure
  - Arrange EEG
  - EEG: no epilepi form discharge, normal a back ground

day3

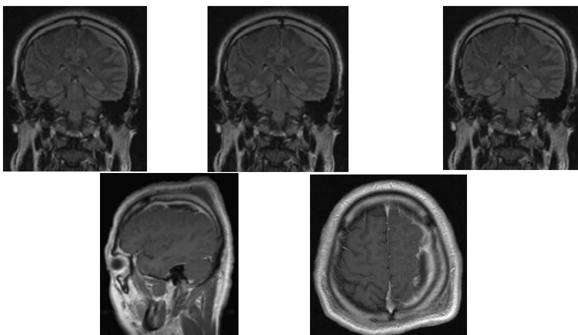
- Infection doctor consultation
  - Impression: encephalitis, suspect viral or other etiology

HIV Screen	0.25	S/CO
RA	<20.0	IU/mL
C3	112.0	mg/dL
C4	26.00	mg/dL

IHA for Amoeba	Negative
Parasite Ova-Direct	Not found

Brain MRI on day5

- Subdural empyema and scalp infection



Biopsy

- day3
  - Ulcer, tissue eosinophilia
- day9
  - Tissue eosinophilia

Treatment

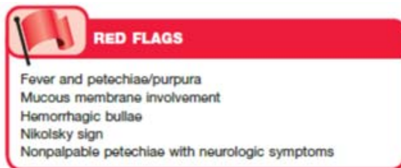
- Acyclovir 750mg iv Q8H
- Vancomycin 500 mg iv Q8H
- Ceftriaxone 2g iv Q12H
- SABS 500mg iv Q8H

Admission to Infection Ward on day8

- Discharge on day17
- Diagnosis
  - Brain subdural empyema
  - Multiple arthritis, skin involvement (eosinophilic dermatitis)

TAKE HOME MESSAGE 1

- SKIN RASH
  - 型態
  - 分布
  - 有無發燒, 旅遊接觸史



TAKE HOME MESSAGE 2

- Headache
  - Primary headache的鑑別
  - Secondary headache的鑑別
  - Red flag signs

Red Flag signs

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Thank you for your attentation !