

# DERMATOMIKOSIS SUPERFISIALIS

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# Kutu Air: Penyebab, Gejala, Penularan, dan Pengobatannya

AMAZINE.CO - ONLINE POPULAR KNOWLEDGE



## 04 ciri penyakit kadas kurap

May Published by Cara Mengobati Kadas Kudis Panu - Categories: #penyakit kadas dan penyebabnya, #penyakit kulit kadas dan kurap, #penyakit kulit kadas dan obatnya, #penyakit panu dan kadas, #cara mengobati penyakit kadas dan kurap



ciri penyakit kadas kurap - Untuk anda yang terkena penyakit kulit yang disebabkan karena jamur kini tersedia pengobatan menggunakan obat herbal dari **De Nature** untuk cara alami menyembuhkan penyakit kadas yang aman tanpa efek samping. Pengobatan kadas dengan obat herbal ini dapat membunuh bakteri penyebab dan menghilangkan bekas penyakit kadas dan kurap dengan cepat - **ciri penyakit kadas kurap**

## Pengertian Penyakit Kadas

Penyakit kulit adalah penyakit infeksi yang umum, terjadi pada orang-orang dari segala usia. Gangguan pada kulit sering terjadi karena ada faktor penyebabnya. Antara lain yaitu iklim, lingkungan, tempat tinggal, kebiasaan hidup kurang sehat, alergi dan lain-lain.



Penyakit kadas sangat menular, terutama pada anak-anak, bisa menyebabkan terbentuknya ruam merah bersisik yang kadang terasa gatal atau menyebabkan kerontokan rambut yang meninggalkan bercak-pitak.



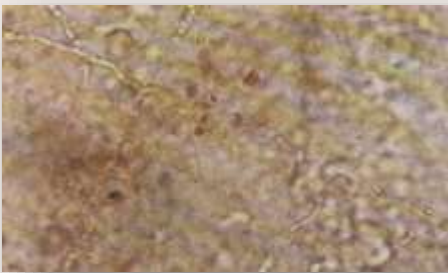


# DERMATOMIKOSIS SUPERFISIALIS

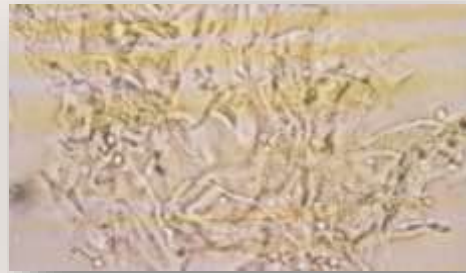
**Infeksi jamur pada kulit dan mukosa**

- **Dermatofitosis → *Dermatophytes***
- **Kandidiasis → *Candida Sp***
- **Pitiriasis versikolor → *Malassezia furfur***
- **Tinea nigra → *Exophiala werneckii***
- **Piedra hitam & putih → *Piedraia hortae* & *Trichosporon beigelii***

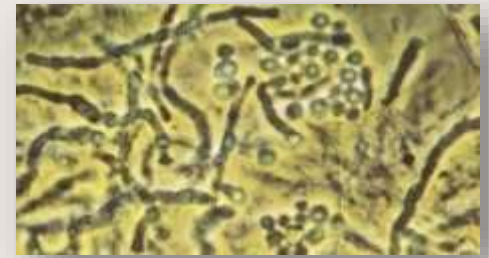
# Dermatomikosis Superfisialis



*Dermatophytes*



*Candida*



*Malassezia furfur*



*Dermatofitosis*



*Kandidiasis*



*P. versikolor*

**Prevalensi dermatomikosis di Indonesia masih tinggi,  
meskipun jenis obat antijamur bertambah**



- **Suhu, kelembaban, higiene**
- **Genetik → pitiriasis versikolor**
- **Iatrogenik → penggunaan antibiotik, kortikosteroid**
- **Kasus imunokompromais : usia (bayi, tua), penggunaan immunosupresan, DM, HIV/AIDS, dsb.**

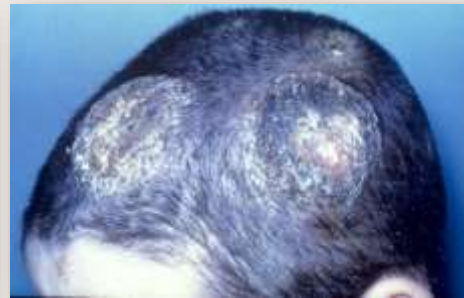
# PATOGENESIS DERMATOFITOSIS

- **Perlekatan** : (  $\pm$  2 jam sejak terjadi kontak )  
perlekatan artrokonidia pada keratinosit
- **Penetrasi** : ( 4 - 6 jam )  
penetrasi ke str. korneum, (kolonisasi hifa atau cabang-cabangnya dalam jaringan keratin yang mati)
- Ketahanan pejamu & faktor imunologi menghambat kemampuan jamur dermatofita melakukan penetrasi pada lapisan stratum korneum yang lebih dalam

# DERMATOFITOSIS

## DEFINISI

- Infeksi jamur dermatofita pada jaringan mengandung keratin  
→ kulit, rambut, kuku





# DERMATOFITOSIS

## ETIOLOGI

- Penyebab 3 spesies :



*Microsporum*



*Trichophyton*



*Epidermophyton*

# DERMATOFITOSIS

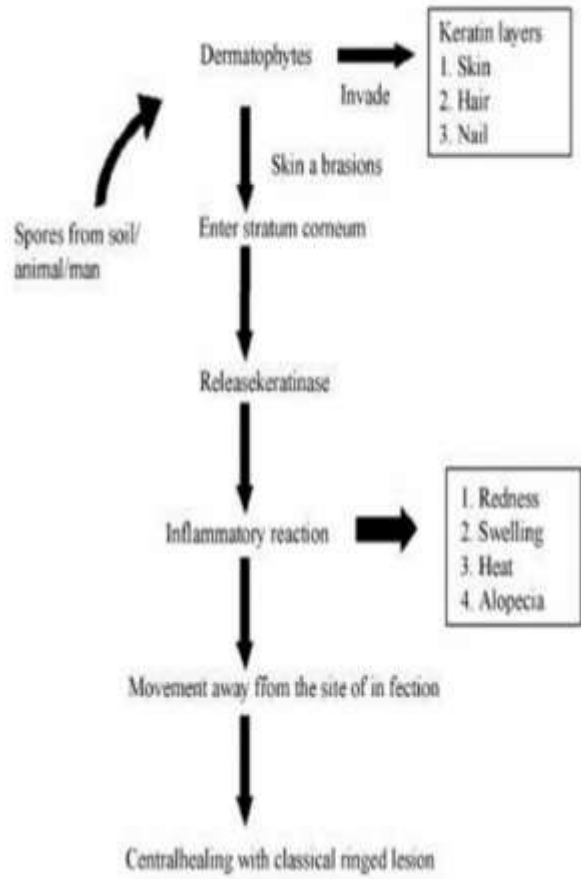
## Faktor predisposisi :

- Higiene sanitasi jelek
- Daerah tropis
- Kelembaban yang tinggi
- Kontak dgn manusia, binatang/tanah terinfeksi jamur

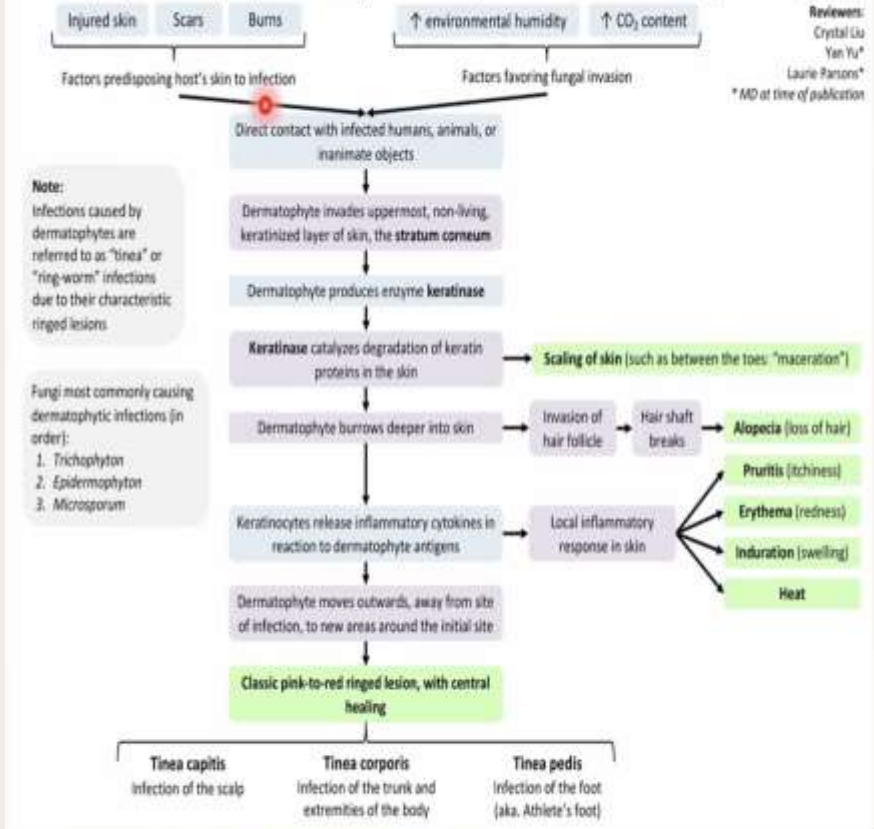
## 3 cara penularan :

- Antropofilik ( manusia ke manusia )
- Zoofilik ( binatang ke manusia )
- Geofilik ( tanah ke manusia )



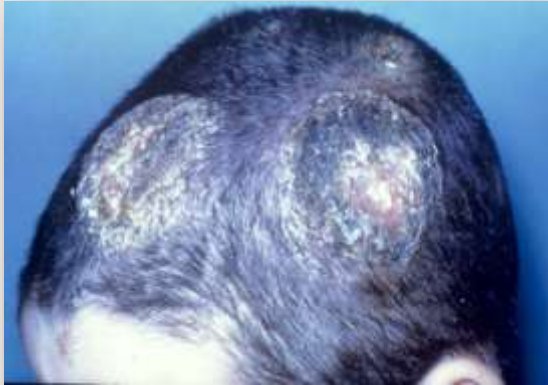


### Tinea capitis, tinea corpora, and tinea pedis: Pathogenesis and Clinical Findings



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# MANIFESTASI KLINIS



**Tinea kapitis**



**Tinea barbae**



**Tinea kruris**



**Tinea korporis**

# Dermatofitosis



**Tinea manum**



**Tinea pedis**



**Tinea unguium**

# TINEA KAPITIS

- ☐ Anak >>
- ☐ Manifestasi klinis :

## 1. *Gray Patch*

- Skuama ---- bercak pucat bersisik → rambut jadi abu-abu, tidak berkilat
- *Seborrheic form Tinea Capitis*



# Manifestasi klinis tinea kapitis

## 2. *Black dot*

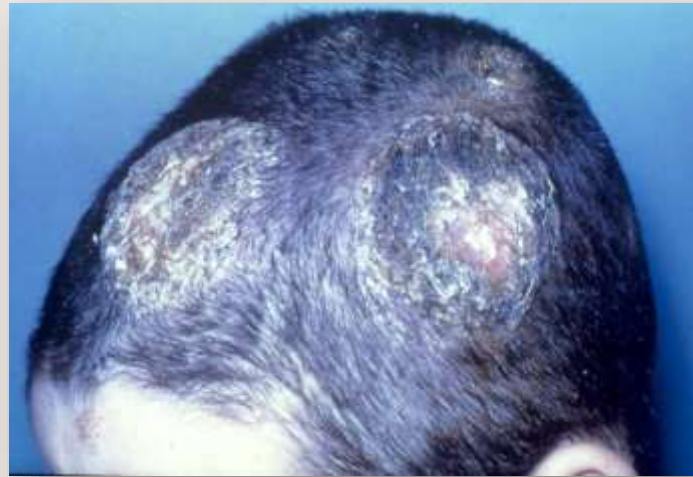
- rambut patah tepat pada muara folikel



# Manifestasi klinis tinea kapitis

## 3. Kerion

- pustula, nodul eritematosa, inflamasi → jaringan parut → alopesia
- limfadenopati







## □ **TINEA BARBAE**



- Pada janggut, jambang, kumis
- Jarang terjadi
- Sering terjadi pada orang yang sering kontak dengan tanah dan hewan

# TINEA BARBAE

- **Gambaran klinis :**
  - Gatal, rambut patah
  - Lesi eritropapuloskuamosa → tepi polisiklis



# TINEA KORPORIS

- *Glabrosa* skin, **kecuali** inguinal, telapak tangan & kaki
- Bentuk :
  - ✓ Anular / *ringworm*
  - ✓ Polisiklik
- Makula eritematosa, batas jelas, tertutup skuama, tepi aktif, tengah menyembuh ( *central healing* )





▲ **FIGURE 188-10** Annular tinea corporis on the thigh. Note multiple, confluent annular lesions with a scaly and partially vesicular border. This type of lesion is usually seen with zoophilic dermatophytic infection.



▲ **FIGURE 188-11** Tinea corporis with typical "ringworm-like" configuration.

















### ***Majocchi Granuloma***

- **Papul/nodul perifolikular eritematosa, anular**
- **Karena pemberian steroid topikal**

# TINEA KRURIS



- **Pria >>**
- **Pada inguinal, genitalia, perineum, perianal**
- **Simetris**
- **Batas jelas, tepi meninggi, tengah menyembuh → coklat kehitaman**



# Tinea Pedis & Manum

- Sering pada orang dewasa yang bekerja di tempat basah / memakai sepatu tertutup (tukang cuci, petani, tentara, olahragawan)
- Lesi pada telapak tangan / kaki dan interdigital
- Manifestasi klinis :
  1. Interdigital
  2. Hiperkeratotik
  3. Vesikobulosa
  4. Ulceratif

# TINEA PEDIS



**Figure 160-14** Tinea pedis. **A**, Interdigital type. The interdigital space is macerated with opaque white scales and has erosions. **B**, Moccasin type. Patchy erythema and scaling in a moccasin distribution on the foot. The arciform pattern of scales is characteristic. **C**, Bullous type. Ruptured bullae, erosions and erythema on the plantar aspect of the great toe. Hyphae were detected on KOH 10% preparation obtained from epithelial cell on the roof of the inner aspect of the bulla.



# TINEA MANUM



# TINEA UNGUIUM

- **3 TIPE :**

- ✓ **DLSO : distal lateral subungual onikomikosis**
- ✓ **PSO : proksimal subungual onikomikosis**
- ✓ **White onikomikosis**
- ✓ **Lain lain : Total distropic**





**Figure 188-14** Tinea unguium. **A.** Distal subungual type. Discoloration, thickening and subungual debris of the distal aspect of the toenails. **B.** Proximal subungual type. Discoloration and thickening of the proximal nail in a patient with acquired immunodeficiency syndrome; Kaposi sarcoma is also seen on the fourth toe. **C.** White superficial type. Irregular opaque white patches on various parts of the nail plates.

# Terapi Topikal

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- Indikasi : DLSO, WSO, KI terapi sistemik
- Macam :
  1. Ciclopirox 8% lacquer : dioleskan setiap hari selama 48 minggu
  2. Amorolfine 5% lacquer : dioleskan 2x seminggu

# Terapi Sistemik

Terbinafine : 250 mg setiap hari selama 6 minggu untuk kuku tangan, 12-16 minggu untuk kuku kaki

**Spektrum lebih sempit** → fungistatik dan fungisida terhadap dermatofita, *Aspergillus*, dan sedikit pada *Scopulariopsis*. Tidak untuk candida

Kesembuhan 50%  
Kekambuhan 20%

Itraconazole : 400 mg setiap hari selama 1 minggu per bulan, dengan dosis 2 denyut untuk kuku tangan, dan minimal 3 denyut untuk kuku kaki

**Spektrum lebih luas** → fungistatik terhadap dermatofita, non-dermatofita, dan yeast

Kesembuhan 25%  
Kekambuhan 50%

Fluconazole : 150-300 mg sekali seminggu selama 3-12 bulan **Spektrum luas** → fungistatik terhadap dermatofita, non-dermatofita, dan *Candida*

Onychomycosis

Ciclopirox  
Amorolfine  
Tioconazole  
Efinaconazole

Adults

- Terbinafine 250 mg/day × 6 to 12 weeks
- Itraconazole 200 mg/day × 2 to 3 months, *or*
- Pulse 400 mg daily × 1 week/month × 2 to 3 months
- Fluconazole 150 to 300 mg/week × 3 to 12 months

Children

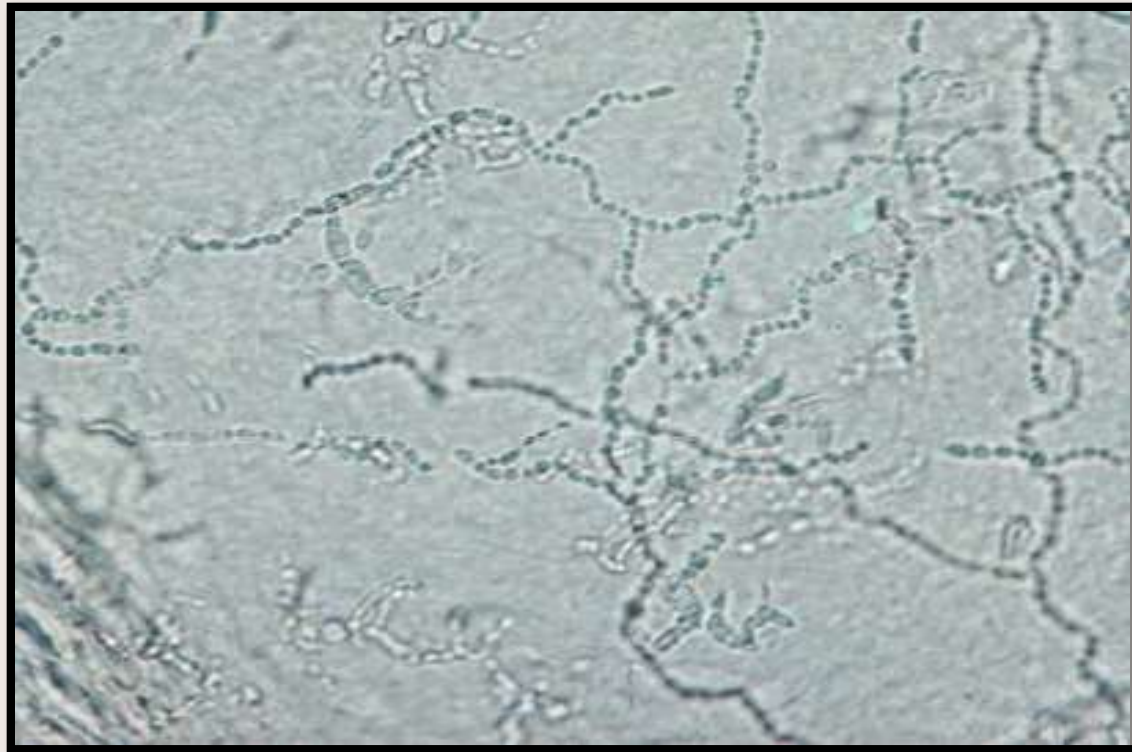
- Terbinafine daily × 6 to 12 weeks
  - Weight 10 to 20 kg: 62.5 mg/day
  - Weight 20 to 40 kg: 125 mg/day
  - Weight >40 kg: 250 mg/day
- Itraconazole 1 week/month × 2 to 3 months
  - Weight <20 kg: 5 mg/kg/day
  - Weight 20 to 40 kg: 100 mg/day
  - Weight 40 to 50 kg: 200 mg/day
  - Weight >50 kg: 200 mg twice daily
- Fluconazole 3 to 6 mg/kg/week × 3 to 6 months

# PEMERIKSAAN PENUNJANG

- **Pemeriksaan mikroskopis langsung :**
  - Kerokan kulit / skuama, rambut, kuku
  - KOH 10 - 20%
  - Hifa bersepta
- **Lampu wood :**
  - Untuk tinea kapitis
  - Positif : Hijau terang kekuningan
- **Kultur :**
  - KOH negatif, klinis menyokong
  - Menentukan spesies



## Pemeriksaan mikroskopis langsung



- Kerokan kulit / skuama, rambut, kuku
- KOH 10 - 20%
- Hifa bersepta



# DIAGNOSIS

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- **ANAMNESIS**
- **KLINIS**
- **PEMERIKSAAN PENUNJANG**
  - **KOH**
  - **KULTUR**

# DIAGNOSIS BANDING

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- **TINEA KAPITIS :**
  - Alopesia areata, dermatitis seboroik
  - Psoriasis
  - Impetigo
- **TINEA BARBAE :**
  - Karbunkel
  - Sikosis barbae
- **TINEA KORPORIS :**
  - Pitiriasis rosea, psoriasis vulgaris
  - Morbus Hansen
  - Lues stadium II

# DIAGNOSIS BANDING

---

- **TINEA KRURIS :**
  - Eritrasma, dermatitis seboroik
  - Psoriasis
  - Dermatitis kontak, kandidiasis
- **TINEA UNGUIUM :**
  - Kandidiasis, psoriasis
- **TINEA PEDIS / MANUM :**
  - Lues stadium II
  - Dermatitis kontak

# TERAPI

## TOPIKAL

- Gol Alilamin
- Gol Imidazol



## SISTEMIK

- Griseofulvin
- Golongan Alilamin
- Golongan Imidazol



**TABLE 160-11**  
**Topical Antifungal Agents**

MEDICATION	CLASS/MECHANISM	FORMULATION	USE	ADMINISTRATION	WARNING/PRECAUTIONS
Amorolfine	Morpholine	Liquid, 250 mg/ 5 mL	Onychomycosis (dermatophyte or <i>Candida</i> ) treatment and/or relapse prophylaxis	Apply 1 to 2 times/week after gentle nail filing × 6 to 12 months	Not available in the United States
Butenafine	Synthetic allylamine	Cream, 1%	Tinea corporis, cruris, pedis, versicolor	Apply 1 to 2 times daily for 1 to 4 weeks	Pregnancy category C Children ≥12 years of age
Ciclopirox	Inhibits DNA, RNA, and protein synthesis	Cream, 0.77% Suspension, 0.77% Gel, 0.77%	Tinea corporis, cruris, pedis, versicolor; cutaneous <i>Candida</i> ; seborrheic dermatitis	Apply twice daily	Pregnancy category B Cream and suspension, children >10 years of age Gel and shampoo, children >16 years of age Solution, children ≥12 years of age
		Shampoo, 0.1%	Seborrheic dermatitis	Apply, wait 5 to 10 minutes prior to rinsing; use 2 to 3 times/week to treat, 1 to 2 times/week to maintain	
		Solution, 8%	Onychomycosis	Apply to nail and surround- ing skin at bedtime × 7 days, then remove with rubbing alcohol and repeat	
Clotrimazole	Imidazole	Cream, 1% Ointment, 1% Solution, 1%	Tinea corporis, cruris, pedis, versicolor	Apply twice daily × 1 to 4 weeks	Pregnancy category B
Econazole	Imidazole	Cream, 1% Foam, 1%	Tinea corporis, cruris, pedis, versicolor	Apply 1 to 2 times daily × 2 to 4 weeks	Pregnancy category C Children ≥12 years of age

**TABLE 160-11**  
**Topical Antifungal Agents (Continued)**

MEDICATION	CLASS/MECHANISM	FORMULATION	USE	ADMINISTRATION	WARNING/PRECAUTIONS
Efinaconazole	Triazole	Solution, 10%	Onychomycosis	Apply daily × 48 weeks	Pregnancy category C
Gentian violet	Antifungal Antibiotic	Solution, 1% and 2%	Superficial cutaneous infections, effective against some Gram+ bacteria ( <i>Staphylococcus</i> sp.), fungi, some yeasts	Apply 1 to 2 times daily	Pregnancy category not classified Stains skin and clothing May tattoo open wounds
Ketoconazole	Imidazole	Cream, 2% Foam, 2% Gel, 2%  Shampoo, 1% and 2%	Tinea corporis, cruris, pedis, versicolor; cutaneous <i>Candida</i> ; seborrheic dermatitis  Tinea capitis adjuvant, tinea versicolor, seborrheic dermatitis	Apply 1 to 2 times daily  Apply, wait 5 to 10 mins prior to rinsing; use 2 to 3 times/week to treat, 1 to 2 times/week as prophylaxis	Pregnancy category C Children ≥12 years of age
Miconazole	Imidazole	Aerosol, 2% Cream, 2% Lotion, 2% Ointment, 2% Powder, 2% Solution, 2%	Tinea corporis, cruris, pedis	Apply twice daily × 4 weeks	Pregnancy category not classified Children ≥2 years of age May increase serum concentration of vitamin K agonist
Povidone-iodine	Broad-spectrum germicidal agent	Wash, 7.5% Shampoo, 7.5%	Tinea capitis and barbae adjuvant, seborrheic dermatitis	Use twice weekly until controlled, then once weekly	Pregnancy category C Use with caution in children Hypersensitivity to iodine contraindication
Selenium sulfide	Cytostatic effects on keratinocytes	Foam, 2.25% Lotion, 2.25% Shampoo, 1% and 2.3%	Tinea capitis adjuvant, tinea versicolor, seborrheic dermatitis	Foam: twice daily Lotion: Apply, rinse after 10 minutes once daily × 1 week, then once monthly × 3 months Shampoo: Apply, wait 5 to 10 mins prior to rinsing; use 2 to 3 times/week to treat, 1 to 2 times/week as prophylaxis	Pregnancy category C Children ≥2 years of age
Terbinafine	Allylamine	Cream, 1% Gel, 1% Solution, 1%	Tinea corporis, cruris, pedis, versicolor; cutaneous candidiasis	Apply 1 to 2 times daily × 1 to 2 weeks	Pregnancy category not classified Children ≥12 years of age
Tioconazole	Imidazole	Solution, 28%	Onychomycosis	Apply twice daily × 6 to 12 months	Not available in the United States Possible allergic contact dermatitis
Tolnaftate	Distorts hyphae and mycelial growth	Aerosol, 1% Cream, 1% Lotion, 1% Powder, 1% Solution, 1%	Tinea corporis, cruris, pedis	Apply twice daily × 2 to 4 weeks	Pregnancy category not classified Children ≥2 years of age
Zinc pyrithione	Keratolytic	Bar, 2% Liquid/wash, 0.5% Shampoo, 2%	Tinea capitis and barbae adjuvant; seborrheic dermatitis	Use at least 2 times/week	Pregnancy category C

**TABLE 160-9**  
**Treatment of Dermatophytes**

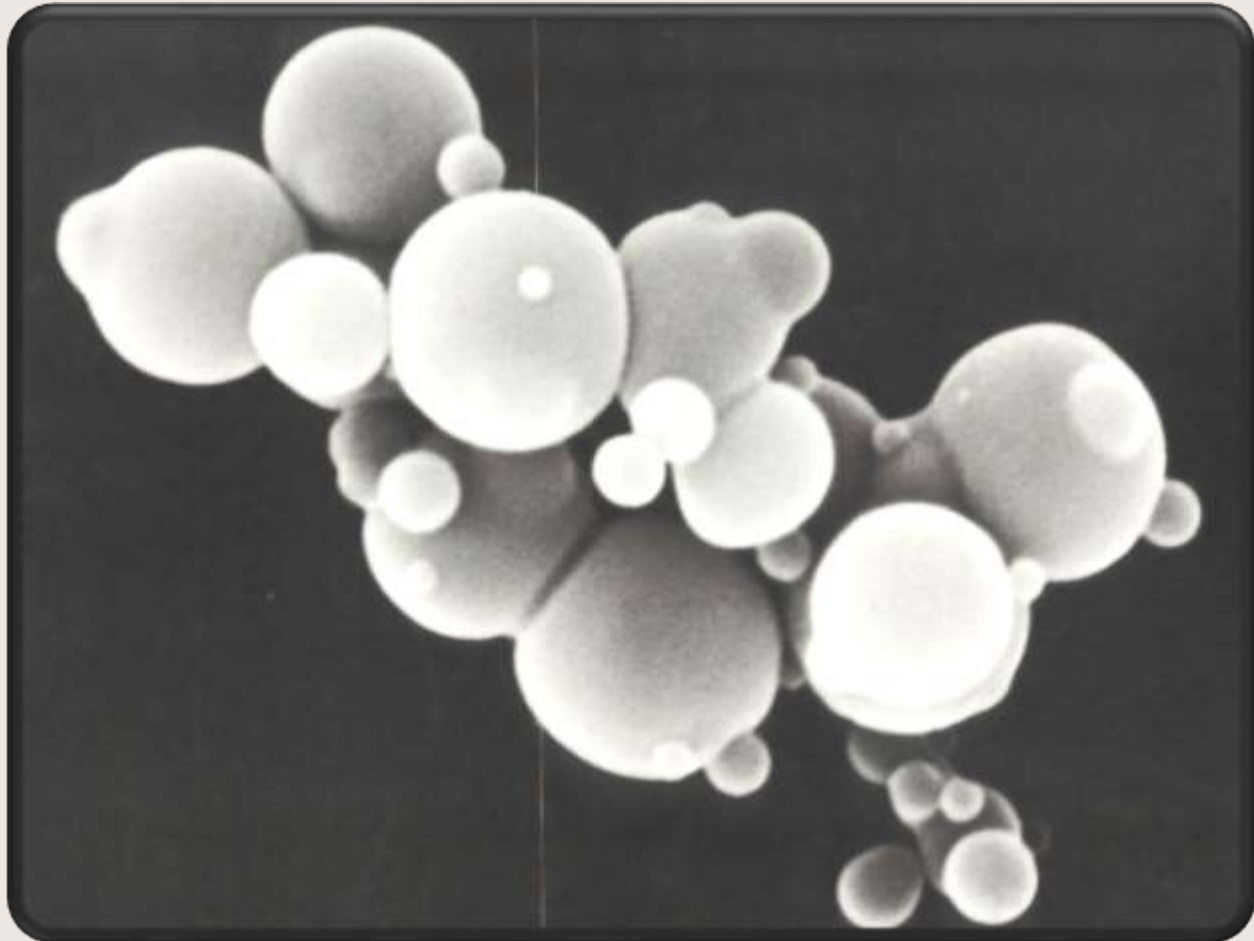
DISEASE	TOPICAL TREATMENT	SYSTEMIC TREATMENT
Tinea capitis (requires systemic treatment)	Only as adjuvant Selenium sulfide 1% or 2.5% Zinc pyrithione 1% or 2% Povidone-iodine 2.5% Ketoconazole 2%	<p>Adults</p> <ul style="list-style-type: none"> <li>Griseofulvin, 20 to 25 mg/kg/day × 6 to 8 weeks</li> <li>Terbinafine, 250 mg/day × 2 to 8 weeks</li> <li>Itraconazole, 5 mg/kg/day × 2 to 4 weeks</li> <li>Fluconazole, 6 mg/kg/day × 3 to 6 weeks</li> </ul> <p>Children</p> <ul style="list-style-type: none"> <li>Griseofulvin, daily × 6 to 8 weeks                             <ul style="list-style-type: none"> <li>Age 1 month to 2 years: 10 mg/kg/day</li> <li>Age ≥2 years: 20 to 25 mg/kg/day (micro)</li> <li>Age ≥2 years: 10 to 15 mg/kg/day (ultramicro)</li> </ul> </li> <li>Terbinafine daily × 2 to 4 weeks                             <ul style="list-style-type: none"> <li>Weight &lt;20 kg: 62.5 mg/day</li> <li>Weight 20 to 40 kg: 125 mg/day</li> <li>Weight &gt;40 kg: 250 mg/day</li> </ul> </li> <li>Itraconazole                             <ul style="list-style-type: none"> <li>3 to 5 mg/kg/day × 2 to 4 weeks</li> <li>5 mg/kg/day × 1 week/month × 2 to 3 months</li> </ul> </li> <li>Fluconazole (not standard therapy)                             <ul style="list-style-type: none"> <li>6 mg/kg/day × 3 to 6 weeks</li> <li>6 mg/kg once weekly × 8 to 12 weeks</li> </ul> </li> </ul>
Tinea barbae (requires systemic treatment)	Only as adjuvant Zinc pyrithione 1% or 2% Povidone-iodine 2.5%	<ul style="list-style-type: none"> <li>Griseofulvin 1 g/day × 6 weeks</li> <li>Terbinafine 250 mg/day × 2 to 4 weeks</li> <li>Itraconazole 200 mg/day × 2 to 4 weeks</li> <li>Fluconazole 200 mg/day × 4 to 6 weeks</li> </ul>
Tinea corporis/cruis	Alylamines Imidazoles Tolnaftate Butenafine Ciclopirox Gentian violet	<p>Adults</p> <ul style="list-style-type: none"> <li>Terbinafine 250 mg/day × 2 to 4 weeks</li> <li>Itraconazole 100 mg/day × 1 week</li> <li>Fluconazole 150 to 300 mg/day × 4 to 6 weeks</li> <li>Griseofulvin 500 mg/day × 2 to 4 weeks</li> </ul> <p>Children</p> <ul style="list-style-type: none"> <li>Terbinafine 3 to 6 mg/kg/day × 2 weeks</li> <li>Itraconazole 5 mg/kg/day × 1 week</li> <li>Griseofulvin 10 to 20 mg/kg/day × 2 to 4 weeks</li> </ul>
Tinea pedis/manuum	Alylamine Imidazoles Ciclopirox Benzylamine Tolnaftate Undecenoic acid	<p>Adults</p> <ul style="list-style-type: none"> <li>Terbinafine 250 mg/day × 2 weeks</li> <li>Itraconazole 200 mg twice daily × 1 week</li> <li>Fluconazole 150 mg/week × 3 to 4 weeks</li> </ul> <p>Children</p> <ul style="list-style-type: none"> <li>Terbinafine 3 to 6 mg/kg/day × 2 weeks</li> <li>Itraconazole 5 mg/kg/day × 2 weeks</li> </ul>
Onychomycosis	Ciclopirox Amorolfine Tincnazole Efinaconazole	<p>Adults</p> <ul style="list-style-type: none"> <li>Terbinafine 250 mg/day × 6 to 12 weeks</li> <li>Itraconazole 200 mg/day × 2 to 3 months, or</li> <li>Pulse 400 mg daily × 1 week/month × 2 to 3 months</li> <li>Fluconazole 150 to 300 mg/week × 3 to 12 months</li> </ul> <p>Children</p> <ul style="list-style-type: none"> <li>Terbinafine daily × 6 to 12 weeks                             <ul style="list-style-type: none"> <li>Weight 10 to 20 kg: 62.5 mg/day</li> <li>Weight 20 to 40 kg: 125 mg/day</li> <li>Weight &gt;40 kg: 250 mg/day</li> </ul> </li> <li>Itraconazole 1 week/month × 2 to 3 months                             <ul style="list-style-type: none"> <li>Weight &lt;20 kg: 5 mg/kg/day</li> <li>Weight 20 to 40 kg: 100 mg/day</li> <li>Weight 40 to 50 kg: 200 mg/day</li> <li>Weight &gt;50 kg: 200 mg twice daily</li> </ul> </li> <li>Fluconazole 3 to 6 mg/kg/week × 3 to 6 months</li> </ul>

# **PENYULUHAN**

- **Mengeringkan daerah lipatan-lipatan sesudah mandi**
- **Pakaian, handuk sering dicuci/direndam air panas**
- **Hewan peliharaan yg terinfeksi diobati**



# PITIRIASIS VERSIKOLOR



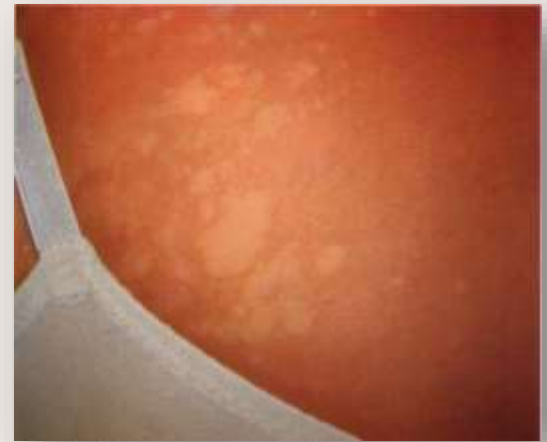
# PITIRIASIS VERSIKOLOR

## DEFINISI :

- Infeksi jamur superfisialis, kronis, asimtomatis, menyerang stratum korneum dari epidermis

## ETIOLOGI :

- *Malassezia furfur*  
= *Pityrosporum orbiculare*  
= *Pityrosporum ovale*



# EPIDEMIOLOGI

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**50%**

Prevalensi di seluruh dunia dengan lingkungan panas

**Ras & Jenis Kelamin**

Tidak ada perbedaan

**1,1%**

Prevalensi di seluruh dunia di iklim dingin

**Usia**

Remaja & dewasa muda

Perubahan dari bentuk *budding yeast cell* (flora normal kulit)

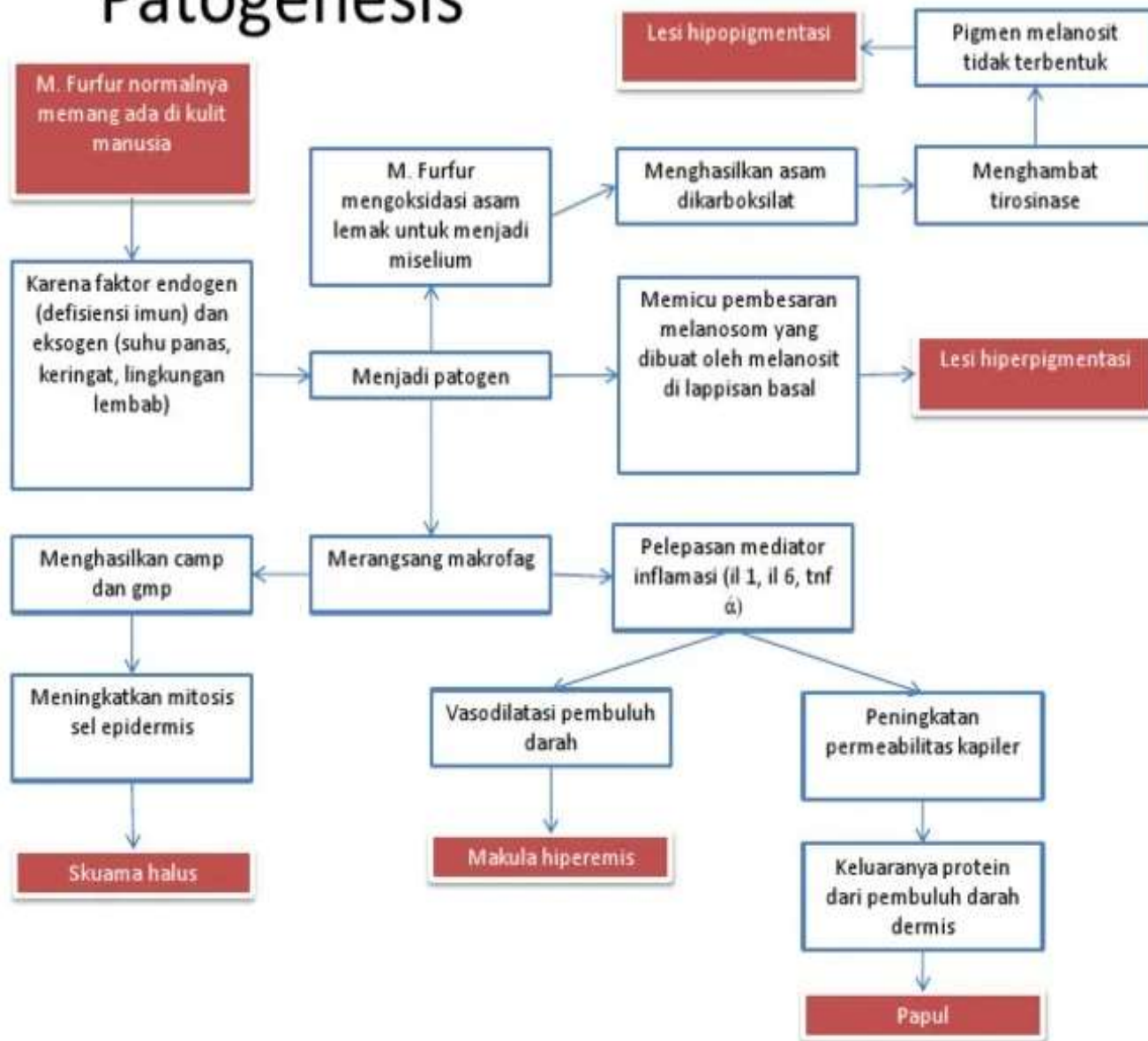
filamen hifa (patogen)

faktor-faktor predisposisi

**Endogen**  
Genetik  
Imunodefisiensi  
Sindroma Cushing  
Malnutrisi

**Eksogen**  
Kelembapan  
Higiene jelek  
Pakaian tertutup  
Pemakaian emolien

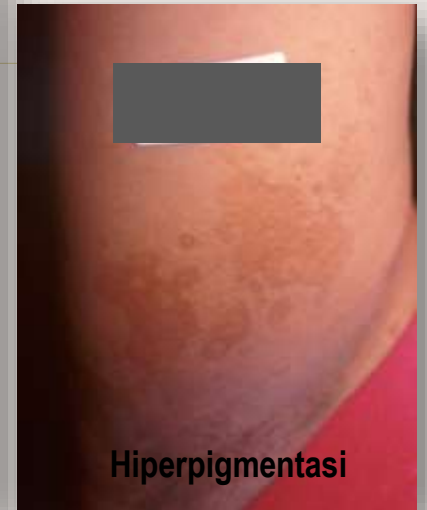
# Patogenesis



# GAMBARAN KLINIS

- Kadang-kadang tanpa keluhan
- Gatal bila berkeringat
- Warna putih / coklat kehitaman/ kemerahan
- Lesi kulit :
  - Makular :  
soliter / saling bertemu (koalesen), skuama
  - Papular / gutata :  
bulat kecil-kecil, perifolikular, skuama



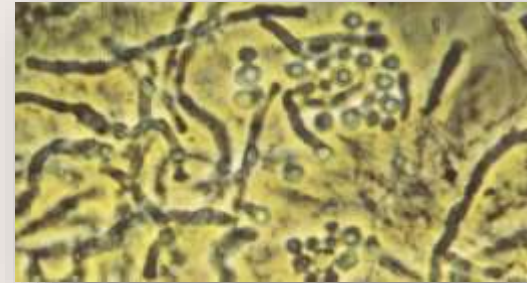






# PEMERIKSAAN PENUNJANG

- **MIKROSKOPIS LANGSUNG**
  - Kerokan kulit
  - KOH 10-20%
  - *Spagetti meat ball*
- **LAMPU WOOD**
  - Kuning keemasan
- **KULTUR**



# Mikroskopis langsung

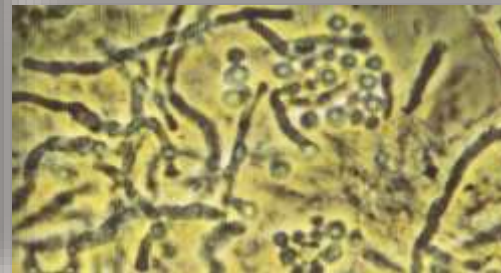


**Kerokan kulit**

**KOH 10-20% → *Spagetti meat ball***

# DIAGNOSIS

- ANAMNESIS
- KLINIS
- PEMERIKSAAN PENUNJANG



# DIAGNOSIS BANDING

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- **HIPERPIGMENTASI**
  - Pitiriasis rosea
  - Dermatitis seboroik
  - Tinea corporis
  - Eritrasma
- **HIPOPIGMENTASI**
  - Pitiriasis alba
  - Vitiligo
  - MH tipe tuberkuloid
  - Hipopigmentasi paska inflamasi

# DIAGNOSIS BANDING



*Idiopathic guttate hypomelanosis*

*Malassezia (-)*

*Aging proesses ( >40 th )*

*Sun exposed area*



# DIAGNOSIS BANDING



***Idiopathic progressive macular  
hypomelanosis***

***Malassezia (-)***

***Diduga peran *P. acnes****

***Tx : anti *P. acnes* & UVA/UVB***

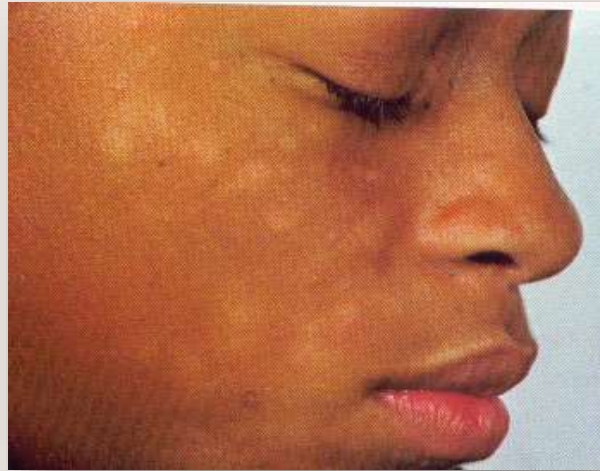


***Vitiligo***

***Malassezia (-)***

***Depigmentasi***

# DIAGNOSIS BANDING



## **Pityriasis alba**

*Malassezia* (-)

Sun exposed area

Terutama pada anak-anak



## **MH PB**

*Malassezia* (-)

Gejala kardinal MH positif

**TABLE 161-4**

**Treatment Algorithm for Cutaneous *Malassezia* Infections**

	<b>FIRST LINE</b>	<b>SECOND LINE</b>
Pityriasis versicolor	Shampoos (pyrithione zinc or selenium sulfide) Propylene glycol in aqueous solution Topical imidazoles (ketoconazole)	Oral fluconazole Oral itraconazole
<i>Malassezia</i> folliculitis	Topical antifungal ± keratolytic (propylene glycol)	Oral itraconazole

- Itrakonazol 200 mg / hr – selama 7 hari
- Flukonazol 300 mg dibagi 2 dosis ( jarak 1 minggu )

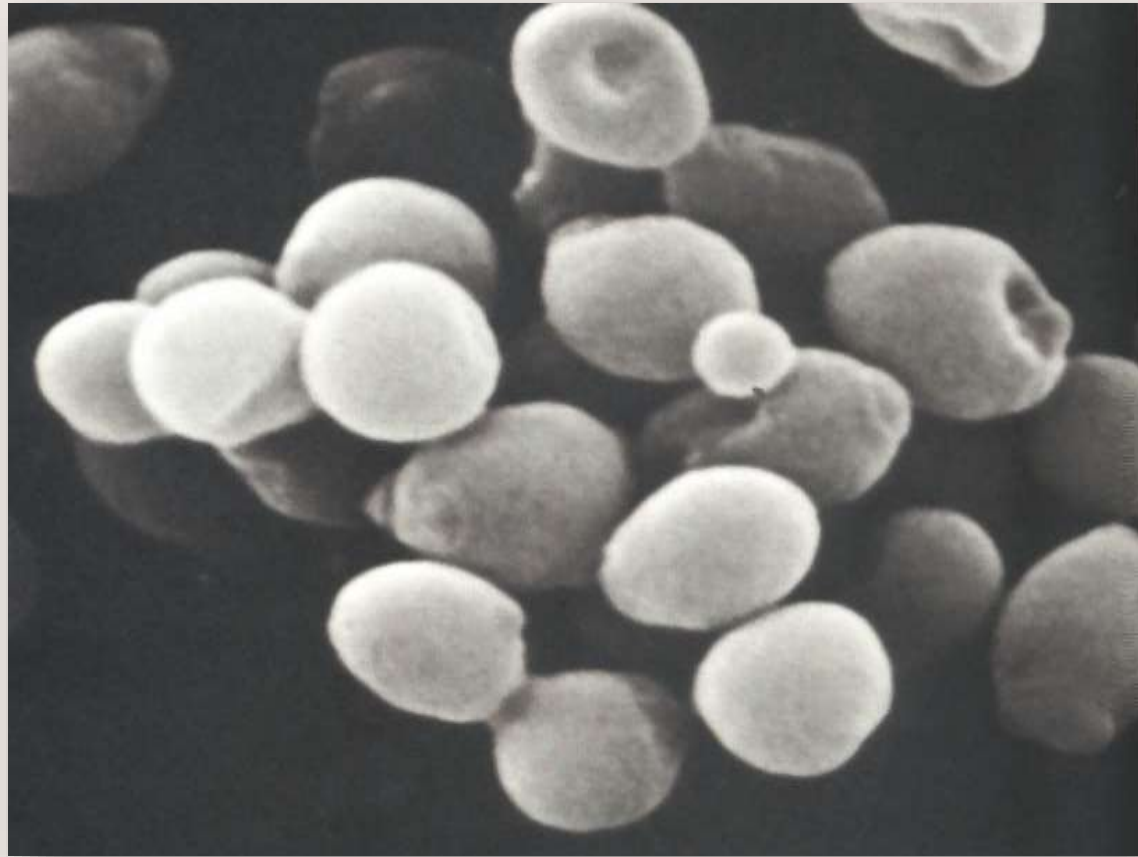


# PROGNOSIS

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- Angka kekambuhan tinggi
- Mencegah kekambuhan :
  - ✓ Itrakonazol 200 mg / bulan selama 6 bln
  - ✓ Selenium sulfid sekali / minggu

# KANDIDIASIS SUPERFISIALIS



# KANDIDIASIS

- Penyakit jamur karena kandida, bersifat akut / kronis, menyerang kulit, kuku, selaput lendir dan organ
- Penyebab utama : *Candida albicans*



# PATOGENESIS

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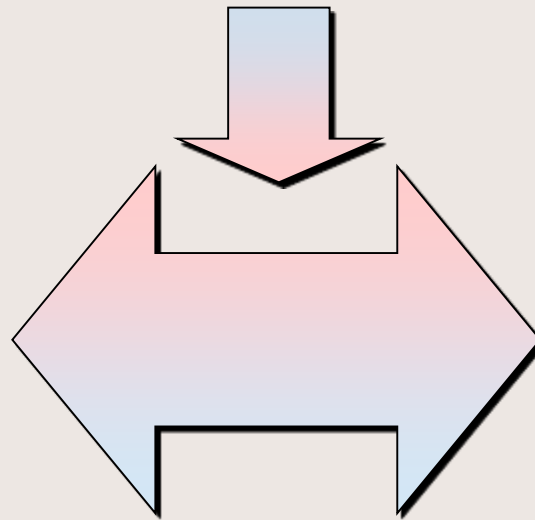
- Belum diketahui dengan pasti
- **Langkah pertama :**  
perlekatan ragi *Candida* sp. pada epitel
- **Langkah kedua :**  
mekanisme invasi → **enzim proteinase & fosfolipase**

# PATOGENESIS

**FAKTOR  
PREDISPOSISI**

**PATOGENITAS  
KANDIDA**

**MEKANISME  
PERTAHANAN  
HOST**



# PATOGENESIS



**FAKTOR  
PREDISPOSISI**



**Pemakaian antibiotika**

**Kehamilan**

**Diabetes mellitus**

**Hormonal**

**Imunosupresi**

**Kelembapan tinggi**

# PATOGENESIS

## *CANDIDA Sp.*

• Spesies: > 80 spesies.

• *C. albicans* patogenisitas paling tinggi

• Daya lekat → tingkat hidrofobisitas (hipa lebih kuat)

• Dimorfisme : blastospora bentuk istirahat, hipa bentuk patogen

• Toksin : gliotoksin → menghambat fagositosis & sistem imun lokal

• Enzim fosfolipase & proteinase → perlekatan pada sel epitel & endotel, kerusakan sel pejamu, penetrasi kolonisasi *Candida*

# Gambaran klinis

## KANDIDIASIS INTERTRIGINOSA

- Gemuk >>, lipatan-lipatan (inguinal, aksila, infra mamma)
- Makula eritematosa, dikelilingi **lesi satelit**, ditengah bisa ada erosi, skuama







# KANDIDIASIS KUKU

- Paling sering terutama pada orang yang tangannya sering kena air
- Nyeri
- Infeksi lipatan kuku proksimal → PARONIKIA
- Eritema, edema, pus putih membentuk kantong





**Kandidiasis kuku**



**Tinea unguium**



## **KANDIDIASIS MUKOSA**

- **Oral**

**Thrush :**

- pseudomembran, putih - krem / keabu-abuan, lekat pada lidah, pipi, palatum, ginggiva, bibir, bila diangkat dasar kemerahan



## **KANDIDIASIS MUKOSA :**

***Perleche :***

- eritema dan fisura pada sudut mulut**

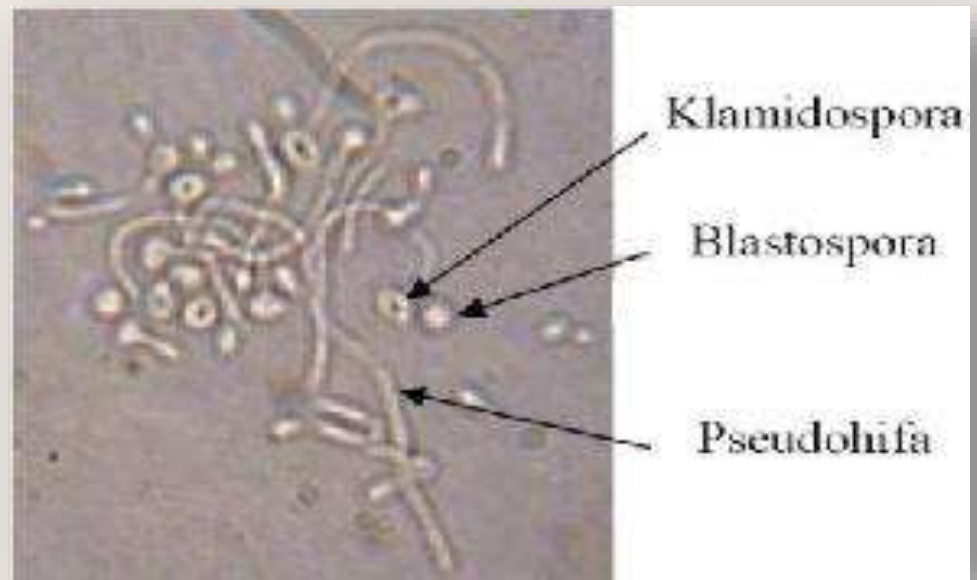


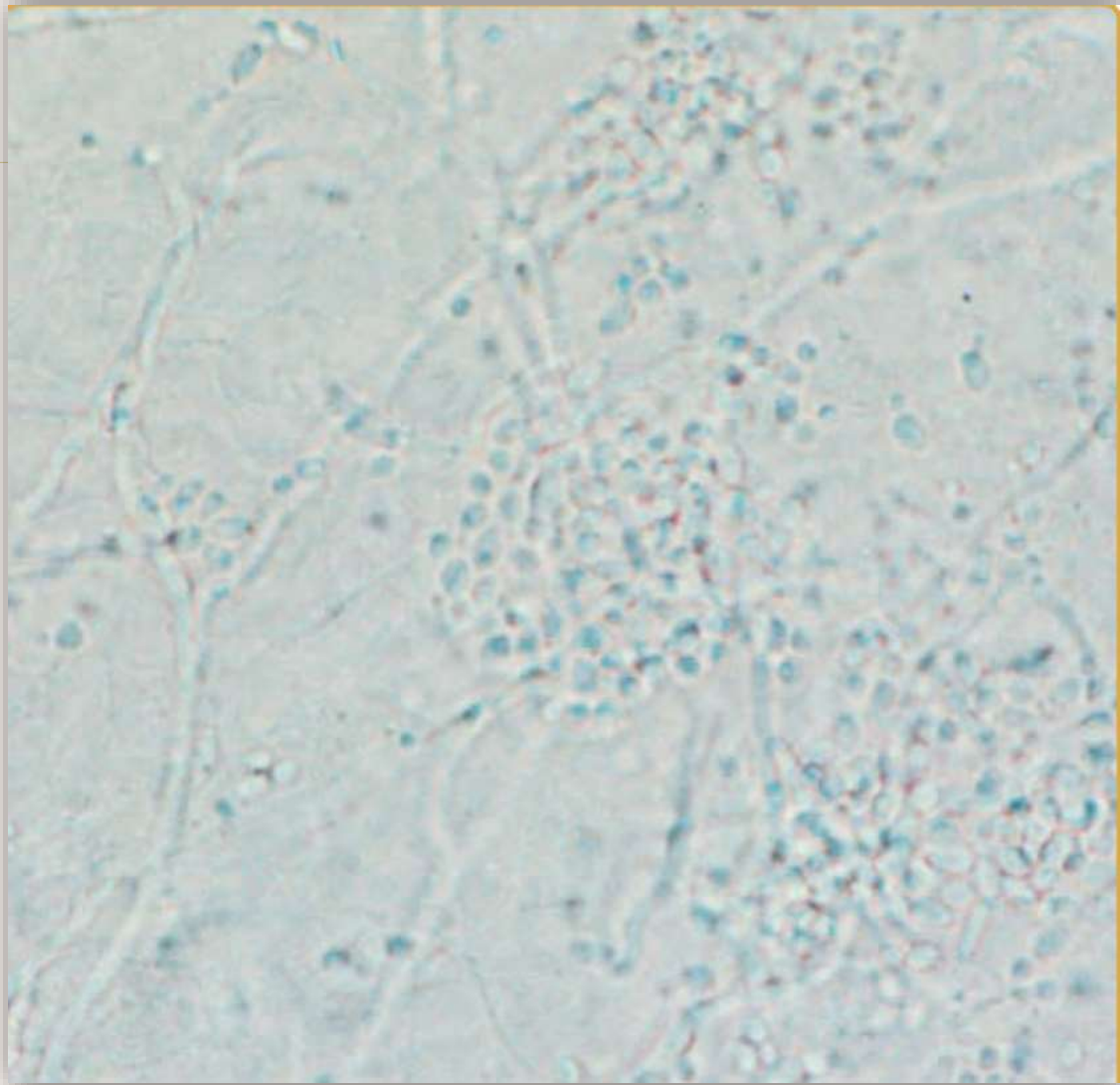
# PEMERIKSAAN PENUNJANG

- Gram / KOH 10% - 20%  
➔ Blastospora, pseudohyphae, yeast cell
- Kultur

## DIAGNOSIS

- Anamnesis
- Klinis
- Laboratorium







# DIAGNOSIS BANDING



TABLE 161-2

**Candidiasis Treatment Algorithm**

	FIRST LINE	SECOND LINE
Cutaneous	Topical imidazoles Topical nystatin	Oral fluconazole
Paronychia	Avoid wet work/use of gloves Topical corticosteroids Topical tacrolimus	Topical imidazole solutions Thymol 40% in ethanol Dilute acetic acid soaks
Onychomycosis	Oral itraconazole Oral fluconazole	Oral terbinafine
Oral (thrush)	Mild: <ul style="list-style-type: none"> <li>▪ Clotrimazole troches</li> <li>▪ Miconazole buccal tablets</li> <li>▪ Disinfect dentures</li> </ul> Severe or immunosuppressed: <ul style="list-style-type: none"> <li>▪ Oral fluconazole</li> </ul>	Nystatin suspension Itraconazole, posaconazole, voriconazole, or amphotericin B solutions/suspensions
Vulvovaginitis	Topical miconazole, clotrimazole, terconazole	Oral fluconazole
Balanoposthitis	Topical antifungal creams	Low- to mid-potency topical corticosteroids (adjunctive)
Chronic mucocutaneous	Oral imidazoles Oral triazoles (voriconazole and posaconazole) Long courses often required	Resistant disease: <ul style="list-style-type: none"> <li>▪ Echinocandins</li> <li>▪ Liposomal amphotericin</li> <li>▪ Flucytosine</li> </ul>
Disseminated (candidemia) <b><i>Infectious disease consultation is required</i></b>	Hemodynamically stable immunocompetent patients: <ul style="list-style-type: none"> <li>▪ Echinocandin (caspofungin, micafungin, or anidulafungin)</li> <li>▪ Fluconazole</li> </ul> Neutropenic patients: <ul style="list-style-type: none"> <li>▪ Empiric echinocandin</li> <li>▪ Switch to fluconazole once stable</li> </ul>	Liposomal amphotericin

# TAKE HOME MESSAGE

- Penatalaksanaan dermatomikosis superfisialis perlu diperhatikan :
  - Identifikasi faktor predisposisi & pencetus
  - Diagnosis tepat → peran pemeriksaan penunjang
  - Obat yang tersedia banyak → pemilihan harus tepat
  - Mengatasi sumber penularan



Perempuan 48 tahun pekerjaan jualan di pasar, datang dengan keluhan bercak merah di ketiak kiri sejak 3 minggu yang lalu disertai dengan rasa gatal terutama kalau berkeringat. Riwayat pengobatan sebelumnya disangkal, tetapi masih belum membaik. Riwayat DM sejak 3 th yll dan tidak terkontrol.

**SOAL :**

1. Sebutkan efloresensi
2. Sebutkan diagnosis dengan tepat
3. Sebutkan 2 pemeriksaan penunjang
4. Sebutkan etiologi





**Terima kasih**