Micosis en el AM

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Table 1 Epidemiology of Fungal Infections in Long-Term Care Facilities

Fungal organism	Pertinent epidemiologic characteristics
Dermatophytes	Usually single cases, men more than women, chronic, relapsing infections; rarely outbreaks occur with spread among patients and health-care workers; potential for outbreaks from pets brought into the facility
Candida	Infection almost always from patient's own endogenous flora; *Candida glabrata* more common in urinary tract and in older persons; infection more likely in those with indwelling intravenous and urinary catheters
Cryptococcus	Acquired from outside environment; may present years later as chronic meningitis or dementia in long-term care resident
Aspergillus	Acquired from outside environment; rare in long-term care facility
Zygomycoses	Acquired from outside environment; rare in long-term care facility

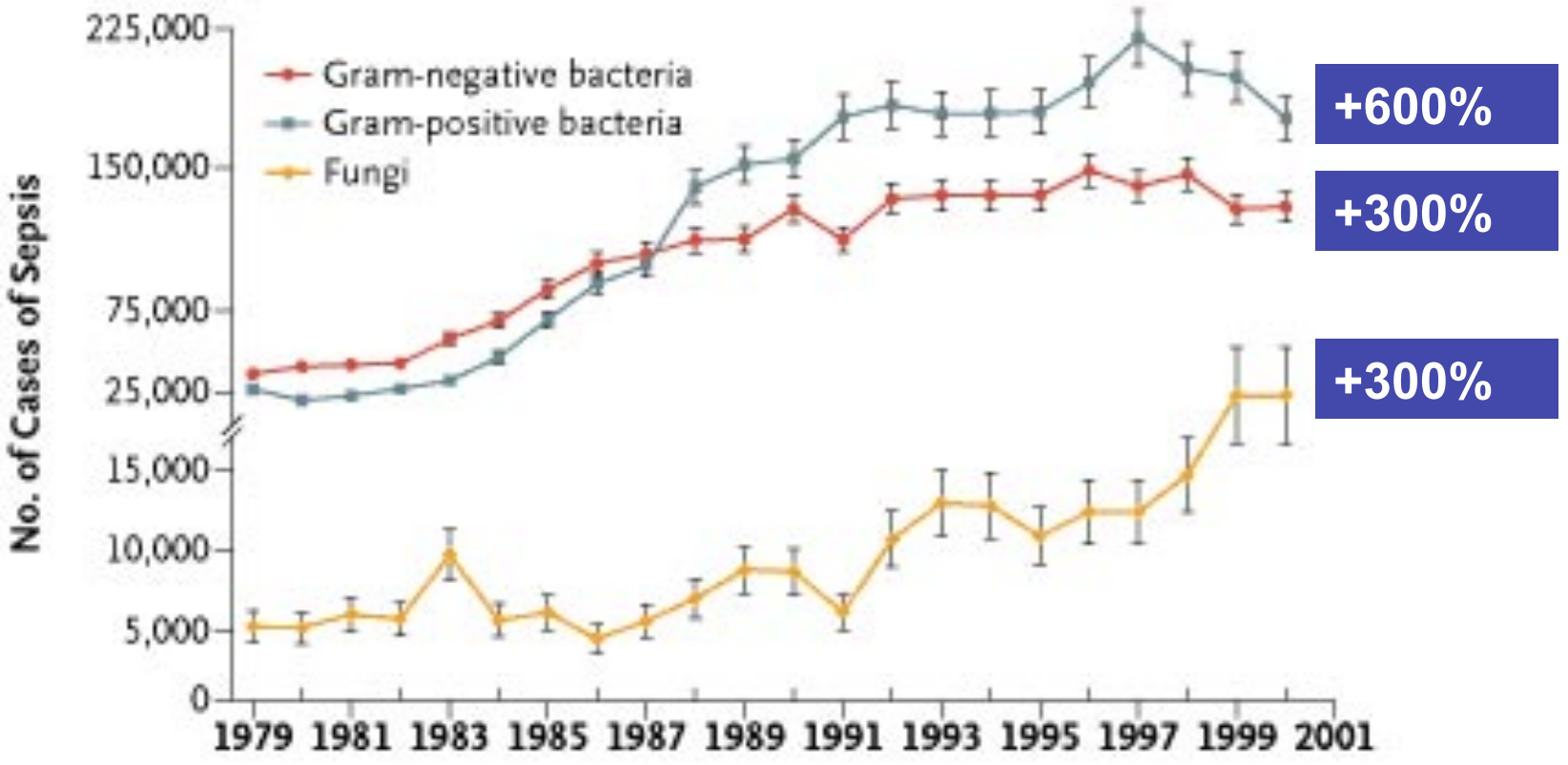
Table 1 Systemic opportunistic fungal infections in older adults

Fungal infection	Risk factors	Usual clinical manifestations
Candidiasis	Neutropenia, hematologic malignancy, corticosteroids, transplant, ICU, antibiotics, IV catheters, parenteral nutrition, GI surgical procedure	Fever, pustular skin rash, hypotension; may have specific organ involvement
Cryptococcosis	Hematologic malignancy, transplant, cirrhosis, corticosteroids; ~25% have no risk factor identified	Headache, fever, cranial nerve palsy, confusion; cough, dyspnea, sputum production for pulmonary infection
Aspergillosis	Neutropenia, hematologic malignancy, corticosteroids, transplant	Fever, pleuritic chest pain, cough; eye/sinus pain, proptosis. ophthalmoplegia, visual loss
Zygomycosis	Diabetes mellitus, hematologic malignancy, neutropenia, transplant, deferoxamine chelation therapy	Eye/sinus pain, necrotic eschar (palate, nares) cavernous sinus thrombosis; fever, pleuritic chest pain, cough

CANDIDA

The Epidemiology of Sepsis in the United States from 1979 through 2000

Increasing rate of candidiasis in the US



Martin et al, NEJM 2003;348:1546

Factores de riesgo : candidiasis

1. Desnutrición: Depleción de Zn, déficit de vit C
2. Institucionalización
3. infecciones
4. radiación
5. mala higiene oral
6. mala dentición
7. Mayor estancia hospitalaria
8. Falla renal
9. Polimedicación
10. Cateteres

Candidiasis

Candidiasis orofaringea

- Xerostomia
- Antibioticos de amplio espectro
- Corticoides inhalados
- Problemas dentales

Candiduria

- DM
- Uropatia obstructiva
- Vejiga neurogénica
- Procedimientos qx
- UCI
- Terapia ATB

Table 2 Major Clinical Manifestations of Infection with *Candida*

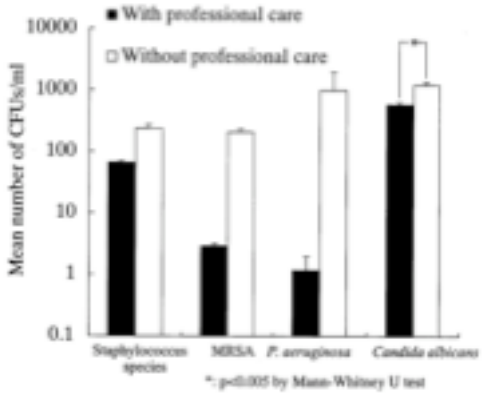
Manifestation	Major characteristics
Oropharyngeal (thrush)	White plaques on buccal mucosa, palate, tongue; under upper dentures appears as diffuse erythema
Cutaneous (intertrigo)	Erythematous, pustular, pruritic rash in warm moist areas; satellite lesions beyond primary border common
Onychomycosis	Thickened, opaque nails with onycholysis
Vulvovaginitis	Erythema, white exudate, and discharge; vulvar pruritus
Urinary tract infection	Lower tract infection–dysuria, increased frequency Upper tract infection–fever, flank pain, nausea, vomiting Fungus ball may form and obstruct collecting system
Candidemia	Fever, chills, hypotension, tachycardia, "toxic" appearance Pustular skin lesions, retinal lesions, vitritis
Invasive candidiasis	Depends on organ involved—includes osteoarticular infections, endocarditis, meningitis, hepatosplenic candidiasis

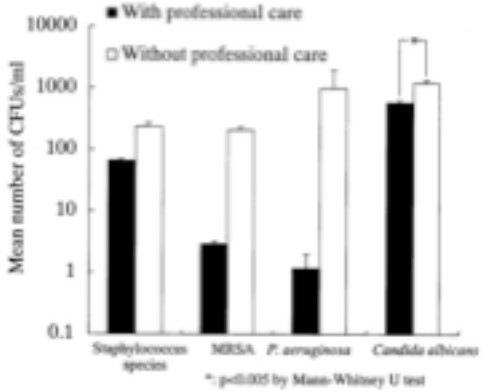
Candida

Table 3
Average CFUs/ml of potential respiratory pathogens in samples from healthy young subjects, healthy elderly subjects and elderly subjects requiring daily nursing care

Subjects	CFUs/ml (Means ± standard error)			
	S. aureus	MRSA	*P. aeruginosa*	*C. albicans*
Healthy young	39.1 ± 23.9	ND[a]	ND[a]	ND[a]
Healthy elderly	19.1 ± 8.5	ND	3.8 ± 3.8	884.8[b] ± 304.6
Elderly requiring daily care	127.4 ± 67.9	77.8 ± 243.0	371.1 ± 370.4	840.0[b] ± 54.1

[a] ND, Not detected.
[b] $P < 0.001$ compared with healthy young people by Mann-Whitney U test.





Tratamiento

Condición o grupo de tratamiento	Terapia		
	Primaria	Alternativa	Comentarios
Candidemia en adultos no neutropénicos			
	Fluconazol, dosis de carga de 800 mg (12 mg/kg) y luego 400 mg (6 mg/kg) diarios o una equinocandina[a] (A-I). Para recomendaciones específicas según la especie, véase el texto.	LFAmB 3 a 5 mg/kg diarios, o AmB-d 0,5 a 1 mg/kg diarios, o voriconazol 400 mg (6 mg/kg) bid por 2 dosis y luego 200 mg (3 mg/kg) bid (A-I)	Elija una equinocandina para enfermedad moderadamente grave a grave y para pacientes con exposición reciente a azoles. La transición al fluconazol luego de una equinocandina inicial es adecuada en muchos casos. Retire todos los catéteres intravasculares, si fuera posible. Trate durante 14 días luego del primer resultado negativo del cultivo en sangre y de la resolución de signos y síntomas asociados con candidemia. Se recomienda un examen oftalmológico para todos los pacientes.

Guías de práctica clínica para el manejo de la candidiasis: actualización del 2009, de la Infectious Diseases Society of America Clinical Infectious Diseases 2009; 48:T1–T35

Tratamiento

Infección de las vías urinarias			
Cistitis asintomática	No suele indicarse terapia, salvo que los pacientes corran un alto riesgo (p. ej. recién nacidos y adultos neutropénicos) o que vayan a someterse a procedimientos urológicos (A-III)	...	Se recomienda eliminar los factores de predisposición. En pacientes de alto riesgo, tratar como en casos de candidiasis diseminada. Para pacientes que vayan a someterse a procedimientos urológicos, fluconazol, 200 a 400 mg (3 a 6 mg/kg) diarios o AmB-d, 0,3 a 0,6 mg/kg diarios, durante varios días antes y después del procedimiento.
Cistitis sintomática	Fluconazol, 200 mg (3 mg/kg) diarios durante 2 semanas (A-III)	AmB-d, 0,3 a 0,6 mg/kg de 1 a 7 días, o flucitosina, 25 mg/kg qid de 7 a 10 días (B-III)	La terapia alternativa, tal como se menciona, se recomienda para pacientes con organismos resistentes al fluconazol. La irrigación de la vejiga con AmB-d se recomienda sólo para pacientes con organismos resistentes al fluconazol (p.ej. *Candida krusei* y *Candida glabrata*).
Pielonefritis	Fluconazol, 200 a 400 mg (3 a 6 mg/kg) diarios durante 2 semanas (B-III)	AmB-d, 0,5 a 0,7 mg/kg diarios, con o sin 5-FC, 25 mg/kg qid, o 5-FC solo, durante 2 semanas	En casos de pacientes con pielonefritis y candidiasis diseminada sospechada, tratar como un caso de candidemia.

Tratamiento

Candidiasis mucocutánea no genital			
Orofaríngea	Comprimidos de clotrimazol, 10 mg 5 veces al día, suspensión o pastillas de nistatina qid (B-II), o fluconazol, 100 a 200 mg diarios (A-I)	Solución de itraconazol, 200 mg diarios o posaconazol, 400 mg qd (A-II), o voriconazol, 200 mg bid; o suspensión oral de AmB (B-II), equinocardina[a] IV o AmB-d, 0,3 mg/kg diarios (B-II)	Se recomienda el fluconazol para casos de enfermedad moderada a grave, y para la enfermedad leve, terapia tópica con clotrimazol o nistatina. Tratar la enfermedad sin complicaciones de 7 a 14 días. Para casos de enfermedad resistente al tratamiento, se recomienda itraconazol, voriconazol, posaconazol o suspensión de AmB.
Esofágica	Fluconazol, 200 a 400 mg (3 a 6 mg/kg) diarios (A-I); una equinocandina[a] o AmB-d, 0,3 a 0,7 mg/kg diarios (B-II)	Solución oral de itraconazol, 200 mg diarios; o posaconazol, 400 mg bid; o voriconazol, 200 mg bid (A-III)	Es preferible usar fluconazol oral. Para pacientes con intolerancia a un agente oral, es adecuado usar por vía intravenosa fluconazol, una equinocandina o AmB-d. Tratar de 14 a 21 días. Para pacientes con enfermedad resistente al tratamiento, se recomienda la terapia alternativa tal como se menciona o AmB-d o una equinocandina.

Table 2. Global frequency analysis (% of total) according to patients' characteristics of itraconazole or fluconazole users

Variables	Itraconazole users (%)	Fluconazole users (%)	*p*-value
Total cases	4843	1446	
Males	2248 (46.4)	691 (47.8)	0.359
Females	2595 (53.6)	755 (52.2)	
Average age ± SD	43.0 ± 16.6	46.6 ± 18.5	0.095
Age groups			
17–45	2896 (59.8)	815 (56.4)	0.019
46–65	1408 (29.1)	406 (28.1)	0.463
>65	539 (11.1)	225 (15.6)	<0.001
Charlson index			
0	3976 (82.1)	1109 (76.7)	<0.001
1–2	667 (13.8)	241 (16.7)	0.005
≥3	200 (4.1)	96 (6.6)	<0.001

INVASIVE FUNGAL INFECTIONS IN ELDERLY PATIENTS RECEIVING ANTIBIOTIC TREATMENT: AN 8-YEAR RETROSPECTIVE STUDY

Table 1. Incidence of Invasive Fungal Infections (IFIs) in Single Antibiotic Treatment

Category and Type of Antibiotic	Incidence of IFIs (%) n/N	95% Confidence Interval	Proportion of Single Use (%)
Carbapenem: imipenem	16.7 (9/54)	6.7–26.6	77.8
Third-generation cephalosporin with beta-lactamase inhibitor: cefoperazone–sulbactam	11.5 (52/451)	8.6–14.5	75.0
Third-generation cephalosporin			
Ceftriaxone	9.6 (21/220)	5.7–13.4	81.0
Cefotaxime	5.3 (15/284)	2.7–7.9	73.3
Total	7.1 (36/504)	4.9–9.4	77.8
Quinolone			
Levofloxacin	3.9 (25/640)	2.4–5.4	88.00
Ciprofloxacin	3.6 (19/522)	2.0–5.2	73.68
Pefloxacin	0.8 (1/128)	0.0–4.3	100.00
Total	3.5 (45/1,290)	0.1–4.2	82.22
Penicillin with beta-lactamase inhibitor			
Amoxicillin–sulbactam	2.9 (2/70)	0.1–4.7	100.00
Ampicillin–sulbactam	0 (0/70)	0	
Amoxicillin–clavulanate	0 (0/29)	0	
Total	1.2 (2/169)	0.1–5.6	100.00
Penicillin			
Penicillin	0 (0/22)	0	
Amoxicillin	0 (0/83)	0	
Piperacillin	25.0 (1/4)	0.6–80.6	100.00
Total	0.9 (1/109)	0.0–5.0	100.00
Total penicillin*	1.1 (3/278)	0.2–3.1	100.00

*Includes penicillin and penicillin with beta-lactamase inhibitor.
n/N = cases with IFIs/samples on antibiotics treatment.

Table 3 Approach to the Patient with Candiduria in the Long-Term Care Setting

Repeat culture to be sure not a contaminant:
- If cannot obtain clean-catch urine, do straight catheterization to obtain urine

If repeat culture is (+) and patient is asymptomatic:
- Assess predisposing factors (diabetes mellitus, antibiotics, indwelling catheters, GU tract abnormalities) and correct if possible
- If patient remains asymptomatic, observe, do not treat

If repeat culture is (+) and patient has mild symptoms suggesting lower urinary tract infection:
- Culture urine for bacteria and treat if found; check whether symptoms resolve
- Assess predisposing factors as listed above and correct if possible
- If bacterial infection not present and predisposing factors removed, observe clinical response and repeat urine culture to see whether funguria has cleared
- If patient remains symptomatic and funguria persists, treat with fluconazole 14 days

If repeat culture is (+) and patient appears ill:
- Image the GU tract to be sure no obstruction present (ultrasound, computed tomography scan)
- If obstruction present, urology consult for options to relieve obstruction
- Obtain blood cultures to be sure not fungemic
- Correct predisposing factors when possible
- Treat with fluconazole 14 days

Follow urine cultures at end of therapy, if clinical condition worsens at any time during treatment, and several weeks after therapy has ended to be certain funguria has cleared

Agent	Action	Adverse effects	Interactions
Azoles			
fluconazole itraconazole voriconazole	Inhibits CYP-dependent enzymes disrupting fungal cell membrane synthesis	Well tolerated in all age groups, except voriconazole[a]	Increase concentrations of CYP-metabolized drugs, such as HMG-CoA reductase inhibitors (statins), anticoagulants, ciclosporin; reduce drug concentrations with hepatic enzyme inducers
Flucytosine	Antimetabolite (inhibits fungal protein synthesis when converted to fluorouracil within fungal cells)	Hepatotoxicity (up to 40%), bone marrow suppression (50–90%)	Increased fluorouracil concentrations when combined with drugs that reduce glomerular filtration rate (e.g. amphotericin B)
Polyenes			
amphotericin B	Interacts with sterols in fungal cell membrane causing cell lysis	Acute infusion-related toxicity (66%), nephrotoxicity	Synergistic nephrotoxicity with aminoglycosides and ciclosporin
Echinocandins			
caspofungin micafungin	Inhibit synthesis of fungal cell wall component [b-(1,3)-D-glucan]	Well tolerated	No significant drug interactions

superficiales

Prevalencia

Table 1: International prevalence of common skin diseases among the community-dwelling elderly

	Year*	Age†	Prevalence‡ (%)
Seborrheic keratosis			
USA [18]	1963	64 +	88
Australia [15]	1999	60–69	85
UK [17]	2000	60–69	58
Xerosis			
USA [24]	1987	74	85
Japan [23]	1993	60 +	48
UK [22]	1955	65 +	29
Campbell De Morgan			
USA [18]	1963	64 +	75
Australia [15]	1999	60–69	67
USA [24]	1987	74	54
Actinic keratosis			
Australia [26]	2000	60–69	74
USA [18]	1963	64 +	28
UK [17]	2000	60–69	14
Tinea Pedis			
Europe [28]	2001	64 +	26
USA [24]	1987	74	18
Australia [15]	1999	60–69	13
Skin cancer			
Australia [30]	1988	60–69	12
USA [12]	1989	65–74	4
UK [22]	1955	65 +	1
Tinea Ungulum			
Australia [15]	1999	60–69	8
Spain [31]	2000	61–70	7
UK [32]	1992	55 +	5
Psoriasis			
Australia [15]	1999	60–69	8
USA [24]	1987	74	3
UK [13]	1976	55–74	2

*Year of study (includes reference number in parenthesis); †subjects' age range or mean age in years; ‡point-prevalence of individual skin diseases (rounded to the nearest whole number).

Table 2: International prevalence of common skin diseases among elderly people in nursing homes

	Year*	Age†	Prevalence‡ (%)
Seborrheic keratosis			
Canada [36]	1987	65–102	85
USA [35]	1952	60–91 +	34
Japan [37]	2004	79	1
Xerosis			
Canada [36]	1987	65–102	77
Taiwan [34]	2002	76	58
USA [38]	1965	81	20
Tinea ungulum			
Taiwan [34]	2002	76	57
Australia [39]	2002	84	23
Canada [36]	1987	65–102	22
Tinea pedis			
Taiwan [34]	2002	76	34
USA [35]	1952	60–91 +	29
Canada [36]	1987	65–102	14
Purpura			
Canada [36]	1987	65–102	24
Australia [39]	2002	84	2
Taiwan [34]	2002	76	2
Pressure sores			
USA [42]	2002	80	10
Sweden [41]	2000	80	4
Denmark [40]	1980	80	2
Stasis dermatitis			
Australia [39]	2002	84	9
USA [35]	1952	60–91 +	8
Denmark [40]	1980	80	7
Skin cancer			
USA [44]	1958	60 +	7
Australia [39]	2002	84	5
Taiwan [34]	2002	76	1

*Year of study (includes reference number in parenthesis); †subjects' age range or mean age in years; ‡point-prevalence of individual skin diseases (rounded to the nearest whole number).

Table 3: International prevalence of common skin diseases among the elderly who visit dermatology clinics

	Year*	Age†	Prevalence‡ (%)
Actinic keratosis			
Canada [36]	1987	65 +	25
USA [48]	1958	70	14
UK [49]	1975	60–90	5
Fungal infections			
Japan [51]	1991	65 +	17
USA [50]	1950	60 +	6
Canada [36]	1987	65 +	3
Xerosis			
Taiwan [54]	2001	65 +	14
USA [53]	1953	65 +	9
Singapore [52]	1994	65–75	5
Skin cancer			
Canada [36]	1987	65 +	13
USA [48]	1958	70	9
Taiwan [54]	2001	65 +	2
Seborrheic keratosis			
Canada [36]	1987	65 +	12
USA [55]	1949	60 +	9
Singapore [52]	1994	65–75	4
Psoriasis			
UK [49]	1975	60–90	11
Thailand [58]	1998	70	7
Italy [57]	1999	68	2
Seborrheic dermatitis			
Taiwan [54]	2001	65 +	9
USA [50]	1950	60 +	6
Singapore [52]	1994	65–75	5
Leg ulcers			
Canada [36]	1987	65 +	3
Singapore [52]	1994	65–75	1
USA [50]	1950	60 +	1

*Year of study (includes reference number in parenthesis); †subjects' age range or mean age in years; ‡point-prevalence of individual skin diseases (rounded to the nearest whole number).

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ESTUDIO CLINICO MICOLOGICO DE ONICOMICOSIS EN ANCIANOS

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TABLA 1
Incidencia por sexo de los casos de onicomicosis confirmados por cultivo.

Sexo	Casos Nº	Casos %	Tasa de Incidencia x 100
Masculino	16	21,6	80,0
Femenino	58	78,4	30,5
Total	74	100	35,2

$p<0,05$

TABLA 2
Factores y enfermedades asociados a la onicomicosis e los casos estudiados.

Factores y/o enfermedades asociados	Casos Nº	Casos % (*)
Diabetes mellitus	14	18,9
Trastornos vasculares	13	17,6
Trastornos podálicos	10	13,5
Obesidad	5	6,8
Medicamentos esteroideos	2	2,7

(*) Los porcentajes son en relación al total de casos confi mados por cultivo (74).

TABLA 3
Caracteristicas clinicas de las uñas afectadas.

Caracteristica clinica	Casos Nº	Casos %
Engrosamiento	65	87,8
Pérdida del brillo	65	87,8
Estrías longitudinales	45	60,8
Color amarillo	40	54,0
Color marrón	25	33,8
Quebradizas	18	24,3
Estrías transversales	16	21,6
Perionixis	12	16,2
Color grisaceo	9	12,2
Dolor	2	2,7

TABLA 4
Resultados de la microscopia y el cultivo en el total de las muestras.

Resultados del laboratorio	Numero de muestras
Microscopía positiva/ Cultivo positivo	58
Microscopía positiva/ Cultivo negativo	10
Microscopía negativa/ Cultivo positivo	22
Microscopía negativa/ Cultivo negativo	10
Total de cultivos positivos	80
Total	100

CONCLUSIONES

Gran interacción medicamentosa

Tratamientos prolongados

Recomendaciones:

uso de medidas profilácticas

Casos leves: Evaluar riesgo – beneficio tto sistémico

Monitorizar tto