

*Biannual summary of opportunistic mycoses and aerobic actinomycetes in New Zealand,
January - June 2007*

Organism	No. of cases	Site	Clinical data
Filamentous fungi			
<i>Aspergillus fumigatus</i>	4	Meatus tissue (1)	DE+, ALL, sinus infection. Also isolated with <i>Mucor ramosissimus</i> .
		Maxillary antrum washout (1)	DE+. Atypical variant. NR.
		Sputum & BAL (1)	DE+. IV drug abuser, bronchiectasis.
		Sputum (1)	DE+. Heart/lung transplant.
<i>Aspergillus fumigatus</i> (presumptive) – failed to grow	1	RUL biopsy	DE dichotomous branching hyphae seen. ALL, prolonged neutropenia; awaiting on BMT. Cavitating lesion in RUL → RUL lobectomy. On prophylactic LAmB already & was discharged on VOR.
<i>Aspergillus terreus</i>	1	Tissue LLL mycotic aneurysm	15-year old with AML. Became unwell with worsening respiratory symptoms (coinciding with white cell count recovery). Antimicrobials intensified - amikacin, timentin, LAmB 5mg/kg, vancomycin. Massive haemoptysis CT angiogram showed probable mycotic aneurysm left middle segment pulmonary artery in LLL. Resected LLL & treated with LAmB. Changed to VOR.
<i>Curvularia lunata</i>	1	Ethmoid & sphenoid tissue	Chronic sinusitis. 2001: <i>Exserohilum rostratum</i> isolated.
<i>Fusarium oxysporum</i>	1	Corneal scrape	DE+. Corneal ulcer.
<i>Microsphaeropsis arundis</i> (identified by 18S sequencing)	1	Elbow biopsy	DE+. Post renal transplant, multiple nodules, on steroids.
<i>Phaeoacremonium parasiticum</i> (identity confirmed by 18S sequencing)	1	Cyst fluid metacarpal joint	DE+. NR.
<i>Rhizomucor pusillus</i>	1	Sputum	DE –ve. Breast Ca few years ago, AML, chemotherapy for BMT, fevers, neutropenia, chest CT scan ?fungal infection. Also has a neurological abnormality with head CT showing multiple nodules. Rx: AmB.
<i>Rhizopus microsporus</i>	1	R) infra temporal fossa	DE+. Multiple myeloma, renal failure, diabetes, sinusitis. Patient lost eye and is declining further treatment.
Yeasts			
<i>Candida albicans</i>	16	Blood culture (12)	Idiopathic necrotising pancreatitis, multi-organ failure. Fungaemia → died; no treatment (1), renal failure, haemodialysis (1), oncology patient (1), neonate (1) post-op, sepsis (1), Ca rectum, post multiple operations, on TPN (1), Pearson syndrome, renal

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			tubular acidosis (1), 52% burns following explosion (1), cerebral palsy, post-thorocotomy & decortication (1), line sepsis (1), CF, also isolated from portacath tip & sputum. On long term ITR for ABPA maintenance (1); congenital cutaneous candidiasis. Rx AmB & CAS (1).
		Breast abscess (1)	DE -ve, recurrent breast infections. Previously isolated June & October 2006.
		CAPD (2)	ESRF, peritonitis.
		Thigh bone & tissue (1)	Osteosarcoma of distal femur.
<i>Candida famata</i>	1	Blood	Infected hip joint, line <i>in-situ</i> .
<i>Candida glabrata</i>	4	Blood (2)	Post-op laparotomy, cholecystectomy (1), aplastic anaemia, post-BMT, multiple sets (catheter & peripheral) positive; assumed line sepsis, line removed but sterile. Blood remains +ve after line removal ?hepatosplenic candidiasis (1).
		Blood & tissue (1)	Necrotising fasciitis.
		Hand dorsum biopsy (1)	DE+. Diabetic, amputation ring finger.
<i>Candida krusei</i>	2	Blood	Nephrology (1), NR (1).
<i>Candida parapsilosis</i>	17	Blood (14)	Renal failure, haemodialysis (1), haemothorax, acquired pneumonia (1), line sepsis (5), ALL, Rx FCZ (1), ascending cholangitis, waiting on liver transplant (1), neonate (1), post-op laparoscopy, hemicolectomy, followed by small bowel resection for obstruction 2° to hernia. CVL <i>in-situ</i> for TPN. Line sepsis. Rx FCZ for 1 month (1),ESRF (1), previous AAA, CHF, deceased (1), NR (1).
		CAPD (1)	ESRF, peritonitis (1)
		Shoulder aspirate (1)	Shoulder joint replacement, recurrent infections, removed.
		Forehead aspirate (1)	DE+. Infected tissue expander.
<i>Candida</i> species	1	Blood	Abdominal surgery.
<i>Candida tropicalis</i>	2	Blood (1)	IV drug abuser. Rx 3 weeks oral FCZ.
		Blood, vitreous & catheter site (1)	DE+. Malignancy, endophthalmitis.
<i>Cryptococcus neoformans</i>	2	CSF (1)	Headache, advanced HIV. Crypto LA = 1:64.
		Blood (1)	Elderly, cryptococcal meningitis, discharged on 3-months FCZ.
<i>Prototheca wickerhamii</i> NOTE: an achloric alga	1	Blood	ALL.
<i>Rhodotorula</i> species	1	Blood	AML.
<i>Pneumocystis jirovecii</i> (<i>carinii</i>)	6	BW/BAL (4)	Immunosuppressed, disseminated Ca, steroid pneumonia (1), atypical infection (1), Ca breast with

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			metastases (1), recurrent NHL post-cell transplantation (1).
		Sputum (1)	HIV+.
		Induced sputum (1)	HIV+.
Aerobic Actinomycetes			
<i>Gordonia</i> species - identified by 16S sequencing.	1	CAPD	DE+. ESRF, peritonitis, repeatedly isolated.
<i>Nocardia asteroides</i> complex	1	Sputum	DE+, NR.
<i>Nocardia cyriacigeorgica</i>	1	Sputum	DE+, NR.
<i>Nocardia nova</i>	1	Knee aspirate	2003: <i>N. farcinica</i> isolated.
<i>Nocardia otitidis-caviarum</i> complex	1	Left great toe	DE+. Repeatedly isolated. Oncology patient.
<i>Rhodococcus coprophilus</i> - identity confirmed by 16S sequencing	1	Elbow wound	Bursitis.

KEY:

AAA	Aortic abdomen aneurysm	CXR	Chest x-ray
ABPA	Allergic bronchopulmonary aspergillosis	DE	Direct examination
ALL	Acute lymphoblastic leukaemia	ESRF	End stage renal failure
AmB	Amphotericin B	FCZ	Fluconazole
AML	Acute myeloid leukaemia	HIV	Human immunodeficiency virus
BAL	Bronchoalveolar lavage	ITR	Itraconazole
BMT	Bone marrow transplant	IV	Intravenous
BW	Bronchial washing	LA	Latex agglutination
Ca	Carcinoma	LAmB	Liposomal Amphotericin B
CAPD	Continuous ambulatory peritoneal dialysis	LLL	Left lower lobe
CAS	Caspofungin	NHL	Non-Hodgkin's Lymphoma
CF	Cystic fibrosis	NR	Clinical data not received
CHF	Chronic heart failure	RUL	Right upper lobe
CSF	Cerebrospinal fluid	Rx	Treatment
CT	Computerised tomography	TPN	Total parenteral nutrition
CVL	Central venous line	VOR	Voriconazole

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