

**Biannual summary of opportunistic mycoses and aerobic actinomycetes  
in New Zealand, July - December 2007**

Organism	No. of cases	Site	Clinical data
<b>Filamentous fungi</b>			
<i>Absidia corymbifera</i>	1	Bronchial washings	DE-. AML neutropenic, disseminated infection. Foot tissue: hyphae seen but failed to grow. Deceased.
<i>Aspergillus fumigatus</i>	6	Maxillary antrum pus (1)	Fungal sinusitis. Rx VOR for 8 weeks.
		Maxillary sinus (1)	DE+. Renal transplant patient.
		Pleural aspirate (1)	DE+. Also isolated from chest swab & intercostal biopsy. Myelofibrosis patient with pneumothorax & drain site infection.
		Sputum (2)	<b>Atypical albino variant.</b> 2003: Jobes syndrome (IgE deficiency) lung resection and left with chest cavity which became infected with typical <i>A. fumigatus</i> . Rx AmB with resolution. 2004: 'glue stuff' put into cavity. 2007: fluid back in cavity with fistula to lung. Rx AmB into cavity. Patient didn't tolerate AmB, changed to CAS, sent home on VOR (1), T-cell ALL, neutropenic sepsis, chest CT scan showed multiple nodular lung opacity without cavitation. Rx VOR (1).
		Scleral plaque (1)	DE+. Past cataract surgery, Rx NAT & ITR.
<i>Aspergillus niger</i>	1	Mastoid cavity	DE-. Pus in cavity, fungal infection.
Dematiaceous hyphomycete – failed to sporulate	1	Finger tissue	Infected long term lesion. Patient from East Africa. DNA sequencing showed less than 98% identity.
Basidiomycetous fungus	1	Sinus tissue	Grown from 2 samples. Both DE-. Post-op craniotomy.
<i>Fusarium solani</i>	1	Corneal scrape	DE+. Transfer from Cook Islands. Admitted with mycotic keratitis. Subsequent "corneal melt" requiring emergency keratoplasty. Rx VOR & NAT, slowly improving with return of eyesight.
<i>Paecilomyces lilacinus</i>	1	Leg nodule	Histology confirmed fungal elements in tissue. ESRF 2 <sup>o</sup> to type I diabetes. Post renal transplant. Cellulitis & subcutaneous nodules lower leg. Rx VOR & cyclosporin level reduced. Infection resolved well.
<i>Scedosporium prolificans</i>	2	Bronchial washings (1)	DE+. Multiple isolations. Bronchiectasis.
		Index finger (1)	DE+. Dropped pot plant crushing fingers, original cultures also grew a <i>Fusarium</i> & <i>Trichoderma</i> species. The <i>Scedosporium</i> persisted. Rx VOR & TER.
<i>Trichoderma pseudokoningii</i>	1	CAPD fluid	ESRF, peritonitis.

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<b>Yeasts</b>			
<i>Candida albicans</i>	17	Blood culture (14)	Diaphragmatic hernia, on TPN (1), neuroblastoma, portacath <i>in-situ</i> (1), post-op laparotomy, on TPN (1), burns (1), oncology patient (1), neonatal ICU patient (1), fever, RUQ pain, gangrenous, perforated gall bladder. Rx FCZ (1), consanguis (multiple problems), repeatedly isolated, unidentified immune deficiency (1), repeatedly isolated, duodenal perforation, post laparotomy (1), cholecystitis, faecal peritonitis, also isolated from RUQ pus. Rx CAS (1), HUS (1), laparotomy, small bowel resection (1), post-laparotomy, perforated rectosigmoid colon, line sepsis, Roth spots in retina fundi. Rx FCZ (1), NR (1).
		Breast aspirate (1)	DE+. Recurrent breast infections.
		CAPD (1)	ESRF, peritonitis.
		Pleural fluid (1)	DE+, ruptured oesophagus on JJ tube for feeding, empyema (1)
<i>Candida dubliniensis</i>	1	Blood	NR
<i>Candida glabrata</i>	3	Blood (2)	AML (1), hemicolectomy for adenocarcinoma, anastomotic leak requiring laparotomy & ileostomy formation. Rx FCZ (1).
		Pleural fluid (1)	Empyema.
<i>Candida guilliermondii</i>	1	Blood	Post op CABG, AVR.
<i>Candida krusei</i>	2	Blood	Nephrology patient (1), gallbladder Ca, multiple infections. Also isolated with <i>Candida albicans</i> , <i>E. faecalis</i> & Viridans streptococci. Sent home on palliative care (1).
<i>Candida parapsilosis</i>	13	Blood (9)	Line sepsis (2), neonatal ICU patient (1), <i>S. aureus</i> endocarditis (1), ESRF on haemodialysis (1), ESRF on haemodialysis, neutropenic (1), AML (1), multiple myeloma (1), post-op CABG x4, AVR (1)
		CAPD (2)	ESRF, peritonitis.
		Corneal scrape (1)	DE+. Traumatic SAH. Rx NAT.
		Deep tibia wound (1)	Jumped from truck in Vanuatu. Rx FCZ.
<i>Candida tropicalis</i>	1	Blood	Line sepsis.
<i>Cryptococcus neoformans</i>	3	Bronchial washing (1)	DE-. Immunocompromised elderly lady.
		Inguinal lymph node (1)	DE+. Sarcoidosis, haemochromatosis, acute illness, characterised by inguinal lymphadenopathy, night sweats, weight loss, marked eosinophilia, raised inflammatory markers, abnormal LFTs. Excised lymph node.

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			Rx 3 week course of AmB followed by 3-6 month course of FCZ.
		Scalp abscess (1)	Newly diagnosed HIV. Rx FCZ. <i>Pneumocystis</i> pneumonia concurrently.
<i>Exophiala jeanselmei</i>	1	Elbow tissue	Repeat isolation. ?Relapse. ?Immunocompromised.
<i>Malassezia furfur</i>	1	Cholesteatoma tissue (ear)	DE+. NR.
<b><i>Pneumocystis jiroveci (carinii)</i></b>			
	14	BW/BAL (10)	NHL, on steroids (1) HIV+, ARF, deceased (1), immunoglobulin deficiency, on methotrexate & steroids (1), rhabdomyosarcoma, respiratory distress (1), HIV+ (2), SCID (1), 3+ steroids for prolonged colitis (1), SCID, BMT 2003, severe GVHD, on steroids & methotrexate, no PCP prophylaxis. SOB on exertion 1/52 with cough (1), lymphoma, deceased (1).
		Sputum (4)	HIV+ (3), lymphoma (1).
<b>Aerobic Actinomycetes</b>			
<i>Gordonia sputi</i>	1	Blood	Multiple isolations. Short gut syndrome, on home TPN. Line sepsis.
<i>Nocardia asteroides</i> complex	1	Breast cyst	DE+. NR.
<i>Nocardia farcinica</i>	1	Left & right elbows	Bilateral elbow cellulitis, myelodysplasia.
<i>Nocardia nova</i>	4	Blood (1)	Repeatedly isolated. Short bowel syndrome on home parental nutrition. One month history of intermittent fevers with associated lethargy & tiredness. Line sepsis. Rx COT.
		Bronchial washing (1)	Haematology patient. Deceased.
		CAPD (1)	Peritonitis, repeatedly isolated, tenckhoff catheter removed.
		Sputum (1)	Repeatedly isolated from TB cultures.
<i>Nocardia veterana</i>	1	Sputum	DE+. NR.

**KEY:**

ALL	Acute lymphoblastic leukaemia	GVHD	Graft vs. host disease
AmB	Amphotericin B	HIV	Human immunodeficiency virus
AML	Acute myeloid leukaemia	HUS	Haemolytic uraemic syndrome
ARF	Acute renal failure	ICU	Intensive care unit
AVR	Aortic valve replacement	ITR	Itraconazole
BAL	Bronchoalveolar lavage	LFT	Liver function tests
BMT	Bone marrow transplant	NHL	Non-Hodgkin's Lymphoma
BW	Bronchial washing	NR	Clinical data not received
Ca	Carcinoma	PCP	Pneumocystis pneumonia
CABG	Coronary artery bypass graft	RUQ	Right upper quadrant
CAPD	Continuous ambulatory peritoneal dialysis	Rx	Treatment
CAS	Caspofungin	SAH	Sub-arachnoid haemorrhage
COT	Cotrimoxazole	SCID	Severe combined immunodeficiency
CT	Computerised tomography	SOB	Shortness of breath
DE	Direct examination	TB	Tuberculosis
ESRF	End stage renal failure	TER	Terbinafine
FCZ	Fluconazole	TPN	Total parenteral nutrition
		VOR	Voriconazole

Collated by Karen Rogers, Mycology Reference Laboratory,  
Microbiology Department, LabPlus, Auckland City Hospital.