

Biannual summary of opportunistic mycoses and aerobic actinomycetes in New Zealand,  
July- December 2006.

Organism	No. of cases	Site	Clinical data
<b>Filamentous fungi</b>			
<i>Aspergillus fumigatus</i>		Alveolus (1)	Parotid Ca. Rx radiotherapy. Changes in mastoid bone on MRI. ENT exploration showed fistula between oral cavity and maxillary sinus. Alveolus bone necrotic and fell away → fungus ball sent to lab. Rx VOR & follow up MRI.
		BAL (1)	DE+, post lung transplant.
		Chest drain tips x2 (1)	17y male with ALL. CT chest showed lung consolidation. Sputa samples also grew a small amount of the fungus and hyphae seen in some samples. Started on Ambisome but passed away.
		Corneal scrape (1)	DE+, 59 year old man with a history of congenital glaucoma and past right enucleation who was admitted with a severe left fungal keratitis. Given no response to treatment, low potential for good visual outcome, severe pain, and risk of spread the eye was enucleated on 15/12/06 without complication. Atypical variant also present.
		Pus x abdominal wall, buttock lesion & vitreous aspirate (1)	Post lung transplant for CF, grown from sputum pre-treatment. Fungal endophthalmitis & erythematous lesions abdominal wall & buttock, septic emboli in spleen, vegetations on mitral valve. (R) eye enucleated. Rx VOR & AMB.
		Sphenoid sinus (1)	DE+, headache and unwell for 4 weeks. Painful eye and blurred vision on day of admission. Sphenoidal sinusitis (on CT scan).
<i>Aspergillus fumigatus</i> (presumptive) – failed to grow	1	L) maxillary sinus (1)	DE 3+ ghostly septate branching hyphae seen. Previous sinus surgery 2001 in Dubai for fungal sinusitis.
<i>Aspergillus fumigatus</i> (presumptive) and a zygomycete – both failed to grow	1	Sputum & LUL biopsy (1)	Ghostly dichotomous branching hyphae & broader aseptate hyphae seen (zygomycete hyphae was predominant). Male 13y, with leukaemia & neutropenia, fungal infection of lungs requiring a LUL lobectomy. Already on Ambisome prior to samples being collected.
<i>Exophiala jeanselmei</i>	1	Foot	DE-, Samoan with 20-30 year history of foot ulceration.
<i>Mucor ramosissimus</i>	1	Hand wound	Following dog bite, exposed tendon & bone.
<i>Phaeoacremonium parasiticum</i>	2	Foot aspirate (1)	DE-, Vietnamese with 2-year history of foot mass on dorsum.
		MTP joint cyst (1)	DE+, NR.

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<i>Phellinus</i> species (‘Bracket fungus’ identified by 18S DNA sequencing).	1	Wrist aspirate & biopsy	DE+. Female 74y, mild cognitive disorder. Cluttered house, poor hygiene, potters in garden. Lesion present for some time. Rx ITR.
<i>Rhizopus</i> species	1	Maxillary sinus plug	Sinusitis.
<i>Rhizopus microsporus</i>	1	Prepatella bursa aspirate	Necrotising fascitis & <i>S. aureus</i> septicaemia.
<i>Scedosporium prolificans</i>	1	Bronchial washing	Post lung transplant. DE+, repeatedly isolated.
<i>Schizophyllum commune</i>	2	Bronchial washing (1)	DE-ve. ABPA on corticosteroids.
		Ethmoid polyp (1)	DE+, NR.
<b>Yeasts</b>			
<i>Candida albicans</i>	25	Blood culture (19)	Lymphoma (2), post laparotomy with adhesions (1), CF (1), post-op laparotomy (1), burns patient from Tahiti (1), internal hernia with anterior abdominal wall cellulitis with abscess (1), bowel obstruction 2° to Ca. CVL <i>in-situ</i> , on TPN. Line removed (1), multiple trauma, long-term IV access, on multiple antibiotics. Rx FCZ (1), surgical patient on TPN (1), Ca, on TPN (1), ICU patient, repeatedly isolated (1), haemodialysis with Tesio catheter, 1° hyperparathyroidism, catheter removed (1), Ca stomach, on chemotherapy & radiotherapy. On TPN with CVL <i>in-situ</i> . Rx FCZ (1), perforated sigmoid diverticulum → ICU. On TPN with CVL <i>in-situ</i> . Rx FCZ (1), perforated duodenal ulcer, RA, immunocompromised. On TPN with CVL <i>in-situ</i> . Rx FCZ, deceased (1), malignancy (2), NR (1).
		Breast aspirate (1)	DE+. Recurrent breast abscess - also isolated June 2006.
		CAPD fluid (5)	ESRF, on CAPD, peritonitis (2), type II diabetes (1), ESRF, peritonitis, also isolated with <i>E. coli</i> (1), unresolving peritonitis, ESRF on CAPD, WCC = 5750, also isolated with a coagulase negative <i>Staphylococcus</i> . Repeatedly isolated. Rx FCZ & removal of Tenckhoff catheter (1).
<i>Candida famata</i>	1	Blood	AML.
<i>Candida glabrata</i>	3	Blood (1)	Rectovaginal fistula, diverticular disease.
		Ascites & subphrenic pus (1)	Perforated duodenal ulcer.
		Subphrenic pus (1)	Cholecystitis.
<i>Candida parapsilosis</i>	14	Blood (13)	Gut ischaemia, ?cause. Line sepsis, also isolated with <i>Candida albicans</i> (1) NIDDM, renal failure, on haemodialysis (2), infected THJR

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			(1), malignancy (1), ESRF, haemodialysis (2), premature baby (1), CVL, ESRF, on haemodialysis (1), chronic knee infection. On long term antibiotics, line <i>in-situ</i> . Line removed. Survived (1), AML patient with line sepsis. Rx FCZ & removal of Hickman line (1), 28 month old child with short gut syndrome, line sepsis (1), NR (1).
		CAPD (1)	ESRF, peritonitis, isolated multiple times & from tenckhoff catheter.
<i>Cryptococcus gattii</i>	1	Nasal mass (x dog)	Chronic nasal discharge, mass seen in nasopharynx. Serum LA = 1:32.
<i>Cryptococcus neoformans</i>	3	Blood (2)	IVDU with sepsis also isolated with <i>A. niger</i> & <i>Fusobacterium spp</i> (1), mantle cell lymphoma; also isolated from pleural aspirate (1).
		CSF (1)	Longstanding pulmonary sarcoidosis. LA = 1:256.
<i>Malassezia pachydermatis</i>	1	Blood	AML, neutropenic, type II diabetes. Rx FCZ & line removed. Survived.
<i>Rhodotorula spp</i>	1	Blood	APML.
<i>Pneumocystis jiroveci (carinii)</i>	8	BW/BAL (6)	HIV+ (1), HIV+, CD4 count = 4, diffuse pulmonary infiltrate (1), immunosuppressed (2), pancreatic Ca, on chemotherapy (1), 5 month old baby with newly diagnosed (today) immunodeficiency, respiratory infection with widespread interstitial disease (1).
		Sputum/tracheal aspirate (2)	Newly diagnosed HIV. Presented with fever, chills rigor and productive cough. Requiring ICU admission with predominately left pneumonia (1), COD with emphysema; on prednisone. Presented with ILD (1).
<b>Aerobic Actinomycetes</b>			
<i>Nocardia cyriacigeorgica</i>	2	Fingerweb (1)	DE+, boil-like lesions between fingers.
		Sputum (1)	DE+, cystic fibrosis.
<i>Nocardia farcinica</i>	1	Thigh wound	Histology +ve. Nephrotic syndrome.
<i>Nocardia nova</i>	1	BAL	On chemotherapy, presented with pneumonia.

**KEY:**

ABPA	Allergic bronchopulmonary aspergillosis	Hx	History
ALL	Acute lymphoblastic leukaemia	ICU	Intensive care unit
AmB	Amphotericin B	ILD	Ischaemic lung disease
AML	Acute myeloid leukaemia	ITR	Itraconazole
BAL	Bronchoalveolar lavage	IV	Intravenous
BW	Bronchial washing	IVDU	Intravenous drug user
Ca	Carcinoma	LA	Latex agglutination
CAPD	Continuous ambulatory peritoneal dialysis	LUL	Left upper lobe
CF	Cystic fibrosis	MRI	Magnetic resonance image
CORD	Chronic obstructive respiratory disease	MTP	Metaphangeal
CSF	Cerebrospinal fluid	PML	Promyelocytic leukaemia
CT	Computerised tomography	NIDDM	Non-insulin dependent diabetes mellitus
CVL	Central venous line	NR	Clinical data not received
DE	Direct examination	RA	Rheumatoid arthritis
ENT	Ear, Nose & Throat	Rx	Treatment
ESRF	End stage renal failure	THJR	Total hip joint replacement
FCZ	Fluconazole	TPN	Total parenteral nutrition
HIV	Human immunodeficiency virus	VOR	Voriconazole
		WCC	White cell count

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