

**Biannual summary of opportunistic mycoses and aerobic actinomycetes in New Zealand,
January-June 2009**

Organism	No. of cases	Site	Clinical data
Filamentous fungi			
<i>Absidia corymbifera</i>	2	Palm (1)	Crush injury, hand amputated & reattached.
		BAL (1)	Neutropenic, BMTU patient. On VOR prophylaxis.
<i>Aspergillus flavus</i>	1	Frontal sinus	DE+. NR.
<i>Aspergillus fumigatus</i>	3	Post mortem lung (1)	COPD patient with non-resolving pneumonia (2 months duration). No response to antibiotics, temperature resolved once VOR commenced. Post mortem necrotising pneumonia and fungus ball.
		Middle meatus (2)	Possible fungal elements seen in Histology. NR (1), fungal sinusitis (1)
<i>Aspergillus niger</i>	1	Frontal wound swab	DE+. Surgery in India for removal of meningioma. On anti-TB treatment. Rx AmB changed to VOR.
<i>Aspergillus species</i>	1	Sinus	DE+, on steroids & antibiotics.
<i>Dactylaria gallopava</i>	1	CAPD	DE+, previous heart transplant, renal failure. Rx VOR (2 weeks).
<i>Fonsecaea pedrosoi</i>	1	Lower leg	Chromoblastomycosis.
<i>Fusarium solani</i>	1	Toe swab	BMTU patient, neutropenic.
<i>Fusarium species</i>	1	Cornea	Got piece of dust in whilst in Tonga. Developed acutely red, painful eye. Started on chloramphenicol with no improvement. Rx Pimaracin.
<i>Paecilomyces variotii</i>	1	Bronchial lavage & tracheal aspirate	DE+, ICU patient with respiratory failure. Deceased.
<i>Scedosporium species</i>	1	Elbow bursa aspirate	Past infection with <i>Scedosporium</i> . Rx ITR.
<i>Schizophyllum commune</i>	1	Occipital lobe	Fungal mycetoma. Surgical excision. Completed three months VOR then changed to oral FCZ. Chronic nodular lung disease probably bronchocentric granulomatosis and 2° bronchiectasis. <i>Schizophyllum</i> infection possibly contributing to this.
Yeasts			
<i>Candida albicans</i>	37	Blood culture (29)	Prostate adenocarcinoma, post-op bowel ileus, line <i>in-situ</i> (1), haemophilic, line sepsis (1), on methadone programme, isolated with <i>Lactobacillus</i> spp (1), ureteric tumour (1), post-op aortic arch repair (1), ruptured aorto-iliac aneurysm, bilateral leg thrombectomy (1), kidney abscess, also isolated from urine (1), perforated diverticulum, patient deceased (1), Cardiology patient (2), surgical patient (1),

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			pancreatitis (1), bowel obstruction (1), ESRF on haemodialysis (1), PUO (2), sepsis, endocarditis (2), febrile, line <i>in-situ</i> (2), NR, also isolated from RUQ abdominal wound swab and CVL tip (1), sepsis (1), pneumonia, multi-organ failure (1), MVA, ventilated (1), pulmonary oedema, ARF (1), feeding gastrostomy & fundoplication; bi-basal bronchiectasis 2° to aspiration. Rx FCZ (1), NR (3)
		CAPD (4)	ESRF on CAPD, also isolated with mixed Gram negative bacilli (1), ESRF on CAPD (3)
		Corneal scraping (1)	Post corneal transplant. Perforated cornea.
		Hip joint aspirate (1)	Revision THJR 2° to <i>C. albicans</i> infection. Long term antifungal prophylaxis
		Knee aspirate (1)	Post TKJR.
		Knee & elbow aspirate (1)	Myeloproliferative disorder.
<i>Candida dubliniensis</i>	1	Blood	On TPN.
<i>Candida famata</i>	1	CAPD	ESRF, peritonitis, deceased.
<i>Candida glabrata</i>	6	Blood (3)	Colon Ca, recent chemotherapy (1), multiple bowel fistulas, deceased (1), HIV+. Rx AmB (1)
		Liver pus (2)	DE+, also isolated with <i>E. faecalis</i> (1), NR (1)
		CAPD (1)	ESRF on CAPD.
<i>Candida guilliermondii</i>	1	Blood	NR.
<i>Candida parapsilosis</i>	20	Blood (8)	Subdural abscess, line sepsis. Rx FCZ & line removal (1), CF patient with line sepsis (1), premature baby (1), premature rupture of the membranes (1), on haemodialysis (1), NR (3)
		CAPD (6)	SLE, ESRF (1), ESRF on CAPD; also isolated with <i>Ps. aeruginosa</i> . Tenckhoff catheter removed (1), ESRF on CAPD (4).
		Elbow aspirate (1)	NR.
		Hip aspirate (2)	DE-ve, NR.
		Knee aspirate (1)	Joint infection. Rx FCZ.
		Breast capsule biopsy (1)	Infected implant.
		Vitreous aspirate (1)	Previous isolation after perforation of eye with #8 fencing wire. Previous treatment with AmB, then VOR and then FCZ. FCZ stopped & steroids increased. Eye deteriorated and re-isolated. Rx intravitreal VOR.
<i>Candida tropicalis</i>	3	Blood (2)	Febrile (1), NR (1)
		CAPD (1)	ESRF, peritonitis.
<i>Cryptococcus neoformans</i>	3	Blood (2)	Awaiting liver transplant, also isolated with a Gram negative

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			bacillus (ESBL producer), patient deceased (1), HIV+ (1)
		Face biopsy & bone marrow (1)	DE+. CLL. Facial nodules. Cryptococcal LA = 1:4096.
<i>Exophiala dermatidis</i>	1	Sputum	DE+ (large nos. of yeast cells seen), CF.
<i>Pneumocystis jiroveci (carinii)</i>			
	10	BW/BAL (6)	HIV+ (3), CLL; also isolated with <i>Nocardia cyriacigeorgica</i> (1), NR (2)
		Sputum/Induced sputum (9)	Immunosuppressed (1), HIV+ (4), Oncology patient (1), CORD (1), Ca sigmoid (1), NR (1)
Aerobic Actinomycetes			
<i>Gordonia terrae</i>	1	Foot tissue	Mycetoma with discharging multiple sinuses. DE+. Also isolated with <i>Rhodococcus</i> species.
<i>Nocardia asteroides</i> complex	2	Sputum (1)	Chest infection. Heavy predominant growth.
		BW (1)	NR.
<i>Nocardia brasiliensis</i>	1	Shin	DE+. NR.
<i>Nocardia cyriacigeorgica</i>	1	BAL	CLL; also <i>Pneumocystis</i> positive.
<i>Nocardia farcinica</i>	1	Blood	Presumed lung Ca. Rx. COT.
<i>Nocardia farcinica</i> - most closely resembles	1	Brain abscess	DE+ (3+). Presented initially with focal seizures. Brain MRI scan: left frontal enhancing lesion. Subsequent deterioration with development of refractory partial seizures and became aphasic with a right sided hemiparesis. On serial imaging the left frontal lesion demonstrated rim enhancement and marked increase in vasogenic oedema.
<i>Nocardia nova</i>	6	Knee abscess (1)	Twist injury. Anterior lateral cellulitis.
		BW	RUL mass opacity on CT & CXR.
		Sputum (3)	History pulmonary fibrosis; also isolated with <i>Mycobacterium avium</i> (1), NR (2).
<i>Nocardia paucivorans</i>	1	Lung FNA	DE+, chest x-ray ?Ca.
<i>Nocardia</i> species	1	Leg swab	Renal impairment. Fell down drain in street and grazed leg. Developed cellulitis. Rx. COT.

KEY:

AmB	Amphotericin B	ESRF	End stage renal failure
ARF	Acute renal failure	FCZ	Fluconazole
BAL	Bronchoalveolar lavage	FNA	Fine needle aspirate
BMTU	Bone Marrow Transplant Unit	HIV	Human immunodeficiency virus
BW	Bronchial washing	ICU	Intensive care unit
Ca	Carcinoma	LA	Latex agglutination
CAPD	Continuous ambulatory peritoneal dialysis	MRI	Magnetic resonance image
CAS	Caspofungin	MVA	Motor vehicle accident
CF	Cystic fibrosis	NR	Clinical data not received
CLL	Chronic lymphoblastic leukaemia	PUO	Pyrexia of unknown origin
COPD	Chronic obstructive pulmonary disease	RUL	Right upper lobe
CORD	Chronic obstructive respiratory disease	Rx	Treatment
COT	Cotrimoxazole	SLE	Systemic lupus erythematosus
CT	Computerised tomography	Tb	Tuberculosis
CXR	Chest x-ray	THJR	Total hip joint replacement
DE	Direct examination	TKJR	Total knee joint replacement
ESBL	Extended spectrum β -lactamase	TPN	Total parenteral nutrition
		VOR	Voriconazole

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