

Biannual summary of opportunistic mycoses and aerobic actinomycetes in New Zealand,
January-June 2010.

Organism	No. of cases	Site	Clinical data
Filamentous fungi			
<i>Absidia corymbifera</i>	2	Thyroid pus (1)	DE+. Nephrotic syndrome managed with several months of steroids, dental abscess with neck swelling. Multiple lung abscesses which grew <i>A. fumigatus</i> . Rx LAmB.
		Ethmoid & maxillary sinuses (1)	Aplastic anaemia.
<i>Aspergillus flavus</i>	2	Nasal mass	Histology +ve. NR (1), fungal sinusitis with orbital extension. Rx ITR → VOR (1).
<i>Aspergillus fumigatus</i>	5	BW (1)	AMML with neutropenic sepsis. Rx VOR (1).
		Nasal tissue & bone (1)	?Burkitt's lymphoma. HRCT showed multiple nodular opacities → diagnosed as IA. Positive Galactomannan x2. Rx AMB, then changed to VOR.
		Maxillary sinus & nose biopsy (1)	Histology +ve. No underlying disease. Sinus surgery.
		Sputum (1)	DE+. Nephrotic syndrome managed with several months of steroids, dental abscess with neck swelling (<i>Absidia corymbifera</i>). Multiple lung abscesses. Rx LAmB.
<i>Aspergillus fumigatus</i> & <i>A. nidulans</i>	1	BW	Newly diagnosed AML. Deteriorating respiratory functions. Initially treated with AMB & VOR. <i>A. nidulans</i> showed reduced susceptibility to AMB so started on CAS, didn't respond - discharged to Hospice Care. Deceased.
<i>Aspergillus</i> species	2	Maxillary sinus (1)	Chronic sinusitis with fungal ball.
		BAL (1)	CLL.
<i>Fusarium oxysporum</i>	1	Corneal scrape	DE+. Foreign body in eye occurred whilst removing projector from ceiling. Rx NAT & VOR.
<i>Fusarium solani</i>	2	Corneal scrape	DE+. 2 day history of painful eye. Rx NAT & VOR (1), 10 day history of red, watering, painful eye. Used 1-2 days of Indian herbal eye drop from plant extract purchased in India. Continues to be uncomfortable. Rx NAT (1).
<i>Mucor ramosissimus</i>	1	Ankle tissue	Multi trauma RTA.
<i>Paecilomyces lilacinicus</i>	1	CAPD	DE+. ESRF on CAPD.
<i>Scytalidium</i> species	1	Leg wound	End stage liver failure. Not treated.
Yeasts			
<i>Candida albicans</i>	22	Blood culture (20)	40yr female, diagnosed with CF at 3 months of age. Cirrhosis, diabetes & post lung transplant. On prophylactic antibiotic cover. Airway colonisation

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			of <i>Candida albicans</i> & <i>C. glabrata</i> . Rx FCZ & CAS (1), pyelonephritis 2° to kidney stones. Rx FCZ (1), SLE, immunocompromised, skin broken down. Also isolated with <i>S. aureus</i> (1), haemophiliac with port infection. Port removed & Rx FCZ (1), premature baby with unformed bowel, also isolated from ankle abscesses ?osteomyelitis. Rx AMB (1), HIV+, Burkitt's lymphoma, neutropenic. Rx FCZ (1), elderly, presented with pneumonia, sepsis 2° to perforated bowel. Deceased (1), also isolated from peri-uteric fluid (1), Hartman's, febrile (1), liver abscess (1), hemicholecystomy (1), bowel problems (1), perforated sigmoid colon Rx FCZ (1), gastrectomy leak (1), ICU patient with <i>E. coli</i> sepsis, Rx FCZ (1), ICU patient (1), line sepsis (1), lung infection, line <i>in-situ</i> (1), post surgery (1), NR (1).
		Eye lens aspirate (1)	NR; also isolated with <i>S. agalactiae</i> .
		Hip aspirate (1)	Liver disease 2° to alcoholic liver disease.
<i>Candida albicans</i> & <i>C. glabrata</i>	1	Blood	NR.
<i>Candida albicans</i> & <i>C. parapsilosis</i> complex	1	Blood	ESRF with associated complications. Recurrent permacath infections.
<i>Candida glabrata</i>	7	Blood (4)	AML (1), Aplastic anaemia, line sepsis, also isolated from urine. Rx LAmB & CAS (1), Crohn's disease with ileo-colic resection, urosepsis. Also isolated with <i>Clostridium</i> & <i>Enterococcus</i> species. Rx FCZ (1), post-surgery (1).
		Sub-pectoral cavity tissue (1)	Post AVR, CT showed large chest wall collection, drained. Rx FCZ.
		Femoral curetting (1)	Paraplegic due to MVA. Buttock pressure sores & sinus tracts. Presented with sepsis die to osteomyelitis. Polymicrobial; <i>C. glabrata</i> , <i>Acintobacter</i> spp, <i>S. epidermidis</i> & another CNS.
		Peritoneal aspirate (1)	Post abdominal surgery. Rx FCZ.
<i>Candida krusei</i>	1	Blood	NR.
<i>Candida lusitaniae</i>	2	CAPD (1)	ESRF, also isolated with <i>S. maltophilia</i> .
		Blood (1)	NR.
<i>Candida norvegensis</i>	1	Blood	Aplastic anaemia with neutropenic sepsis. HRCT showed changes suggestive of IFI. Rx LAmB & then changed to VOR.
<i>Candida parapsilosis</i> complex	20	Blood (10)	ESRF, permacath <i>in-situ</i> . Repeatedly isolated. Line removed (1), ex-IVDU,

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			chronic ulcer on forearm → chronic osteomyelitis; also isolated from CVL tip. Rx oral FCZ (1), original presented with headache ?meningitis. Difficult LP collection (>7 attempts). Re-presented 4 weeks later with back pain → L4 discitis with <i>S. epidermidis</i> . PICC line sepsis with <i>C. parapsilosis</i> . Rx FCZ (1), ESRF on dialysis (2), line sepsis (1), groin hernia, febrile (1) febrile, on TPN, febrile (1), NR (2).
		CAPD (9)	ESRF on CAPD (8), alcoholic liver disease, pancreatitis (1).
		Ankle aspirate (1)	Osteomyelitis. Rx FCZ → cured.
<i>Candida tropicalis</i>	6	Blood (4)	Renal dialysis patient (1), Aplastic anaemia. Rx FCZ (1), endocarditis on lifelong FCZ. Became resistant & changed to VOR. Deceased (1), respiratory patient with portacath <i>in-situ</i> (1).
		CAPD (1)	ESRF on CAPD.
		Abdominal aspirate (1)	Presented with flank pain, discovered draining sinus on (L) flank, perinephric and iliac fossa collections. Admitted to ICU. JJ stent & pigtail drains inserted. Rx FCZ.
<i>Cryptococcus neoformans</i>	3	Blood (1)	HIV+, HepC +ve, past cryptococcal meningitis 1 year ago, not on treatment.
		CSF (1)	RA on prednisone >20 years, fever & delirium. CSF LA = 1:2048. Rx AMB.
		Pleural fluid (1)	Schizophrenic, pneumonia with haemoptysis. Deceased.
<i>Rhodotorula</i> spp	1	Blood	Infected PICC.
<i>Pneumocystis jiroveci (carinii)</i>	11	BW/BAL (9)	HIV+ (1), B-cell CLL (2), T-cell ALL (1), metastatic breast Ca (1), RA and lymphoma, on chemotherapy (1), Oncology patient (1), heart transplant (1), newly diagnosed HIV (1).
		Sputum/Induced sputum (2)	HIV+ (1), NR (1).
Aerobic Actinomycetes			
<i>Nocardia brasiliensis</i>	2	Ring finger (1)	NR.
		Elbow (1)	NR.
<i>Nocardia farcinica</i>	1	Blood	NR.
<i>Nocardia nova</i>	9	Knee abscess (1)	Twist injury. Anterior lateral cellulitis.
		Knee pre-patellar aspirate (1)	One day history of painful swelling.
		Mediastinal mass (1)	CGD child post BMT.
		BW (2)	RUL mass opacity on CT & CXR (1), immunocompromised with fevers

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			(1).
		Sputum (4)	History pulmonary fibrosis; also isolated with <i>Mycobacterium avium</i> (1), previously isolated (1), NR (2).
<i>Nocardia paucivorans</i>	1	Lung FNA	DE+, chest x-ray ?Ca.
<i>Nocardia veterana</i>	1	Sputum	NR
<i>Rhodococcus equi</i>	1	Subcervical lymph node	Prior tiling in a dusty, dirty laundry. Presented with chills, fevers, dry cough and drenching night sweats. CXR shows consolidation. CT scan showed mediastinal lymphadenopathy.
<i>Rhodococcus</i> spp	3	Blood (2)	NR.
		CAPD (1)	Peritonitis.
<i>Tsukamurella</i> species	1	Sputum	CXR shows shadowing & calcification of hilum. Past <i>M. abscessus</i> infection.

KEY:

AmB	Amphotericin B	FCZ	Fluconazole
ALL	Acute lymphoblastic leukaemia	FNA	Fine needle aspirate
AML	Acute myeloid leukaemia	HIV	Human immunodeficiency virus
AMML	Acute myelomonocytic leukaemia	HRCT	High resolution CT scan
AVR	Aortic valve replacement	IA	Invasive Aspergillosis
BAL	Bronchoalveolar lavage	ICU	Intensive care unit
BMT	Bone marrow transplant	IFI	Invasive fungal infection
BW	Bronchial washing	IVDU	Intravenous drug user
Ca	Carcinoma	LA	Latex agglutination
CAPD	Continuous ambulatory peritoneal dialysis	LAmB	Liposomal amphotericin B
CAS	Caspofungin	LP	Lumbar puncture
CF	Cystic fibrosis	MVA	Motor vehicle accident
CGD	Chronic granulomatous disease	NAT	Natamycin
CLL	Chronic lymphoblastic leukaemia	NR	Clinical data not received
CNS	Coagulase negative staphylococci	PICC	Peripherally-inserted central catheter
CSF	Cerebrospinal fluid	RA	Rheumatoid arthritis
CT	Computerised tomography	RTA	Road traffic accident
CVL	Central venous line	RUL	Right upper lobe
CXR	Chest x-ray	Rx	Treatment
DE	Direct examination	SLE	Systemic lupus erythematosus
ESRF	End stage renal failure	TPN	Total parenteral nutrition
		VOR	Voriconazole

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