

disease (ESRD) patients were initiated on peritoneal dialysis (PD) at our institute. During this 14-year period, there were 276 bacterial, 16 tuberculous, 68 fungal, nine nontuberculous mycobacterium (NTM), and 141 culture-negative peritonitis episodes. The cumulative follow-up of 650 patients was 13,710 months. We diagnosed nine cases as peritonitis due to NTM. Hence, the incidence of bacterial, tuberculous, NTM, and fungal peritonitis was one episode per 49.6, 856.8, 1523.3, and 201.6 patient-months, respectively. The patients of peritonitis presented in two clusters—in 2005 and 2012. The mean age was 51.11 years. There were eight males. All patients had growth identified as Runyon class IV: Rapid growers. There was growth on Löwenstein–Jensen medium between 4 and 11 days. The organisms were differentiated from *Mycobacterium tuberculosis* by BACTEC NAP test.^[1]

We compared the clinical and laboratory features of patients of peritonitis due to NTM and those of PD patients with bacterial peritonitis reported during these two years. We could not compare with peritonitis due to *M. tuberculosis*, for there were only three such patients during this period. The data are reported in Table 1.

Only fever was found to be significantly associated with peritonitis due to NTM peritonitis when compared to bacterial peritonitis. An index of suspicion for NTM peritonitis would be an episode of peritonitis appearing early after placement of the catheter. Only one previous study^[2] identified fever to be present in a higher percentage of patients of NTM peritonitis than in other peritonitis.

During the same months of NTM peritonitis, there were reports of infection due to NTM in other surgeries performed at our institute. Culture of tap water and scrapings from the walls of operating room did not yield any growth. However, rapidly growing mycobacteria can be recovered from soil and natural water supplies, and are the most common NTM associated with nosocomial

Peritonitis due to nontuberculous mycobacterium

Sir,

Between 1998 and June 2012, 650 end-stage renal

Table 1: Patients of NTM peritonitis

Patient	Age/sex	Cause of end stage renal disease	Duration of CAPD (days)	Differential cell count of peritoneal fluid	Fever	Total leucocyte count ($\times 10^9/L$)	Growth on LJ medium (day)
1	45/male	CGN	40	Neutrophilia	Present	17.0	Day 4
2	46/ male	HTN	15	Neutrophilia	Present	14.5	Day 11
3	46/male	CGN	45	Lymphocytosis	Absent	19.0	Day 7
4	65/female	DM	26	Neutrophilia	Present	22.0	Day 7
5	45/male	CGN	41	Neutrophilia	Absent	7.8	Day 7
6	60/male	CGN	43	Neutrophilia	Present	25.0	Day 5
7	48/male	Renal calculus disease	20	Lymphocytosis	Present	8.0	Day 4
8	55/male	Obstructive nephropathy	19	Lymphocytosis	Present	8.0	Day 6
9	50/male	HTN	20	Neutrophilia	Present	5.0	Day 11

NTM: Nontuberculous mycobacterium, CGN: chronic glomerulonephritis, HTN: hypertension

disease. Investigations of nosocomial outbreaks or pseudo-outbreaks caused by these species have demonstrated that tap water, ice prepared from tap water, processed tap water used for dialysis, and distilled water used for preparing solutions such as gentian violet are the usual nosocomial sources of the organisms.^[3]

In a recent review^[4] of 41 articles, 57 patients of PD-associated NTM peritonitis were reported. In this review, only patients of NTM peritonitis among PD patients who were confirmed by culture of the peritoneal fluid were included. At least 21 articles were excluded in this review, as NTM was not identified to the species level. At our institute, we do not have the facility to identify the NTM species.

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