Supplementary Table 2 Summary of the most important findings of our three patients

	Patient 1	**Patient 2**	**Patient 3**
Age (years)	11	12	16
Gender	Female	Male	Male
Region	Right hip joint and acetabulum	Right acetabulum, abscess in the pelvis	Left hip joint and acetabulum
Height; weight	1.44 m; 36.4 kg	1.62 m; 63 kg	1.75 m; 84.5 kg
Presumed original focus of infection	Severe diarrhoea	Not known	Tonsils
Initial clinical findings at admission			
Fever	37.5°C	37.5°C	41°C
Septic	No	No	Yes
Laboratory findings at first presentation in hospital			
C-reactive protein (mg/l)	45	40	274
Leucocytes/nl	9.3	8.8	15.5
Erythrocyte sedimentation rate (mm/h)	72	114	72
Procalcitonin (ng/ml)	Not specified	Not specified	78

Magnetic resonance imaging findings			
	Arthritis of the right hip joint with bony involvement and abscess formation extending into the gluteal soft tissues	Extensive osteodestructive process in the right os ilium/ischiadicum with cortical destruction at the level of the medial acetabular wall and posterior acetabular pillar Melting at the level of the epiphyseal groove and subperiosteally on the medial acetabular wall, measuring up to 1.5 and 4.2 cm	Initial: arthritis in the left hip joint with a clear surrounding reaction and fluid in the neighbouring muscles Hospitalisation day 40: clear osteomyelitis in the left acetabulum with an abscess in the region of former Y-joint, signs of necrosis of the femoral epiphysis and still joint effusion with synovial thickening consistent with persistent synovitis
Surgery			
Type of initial surgery	Hospitalisation day 1: arthrotomy with irrigation and drainage	Hospitalisation day 2: fenestration of the abscess in the Y-joint using a 7 mm hollow reamer via the first window ilioinguinal approach, introduction of gentamycin loaded calcium sulfate beads into the abscess cavity and the reaming channel	Hospitalisation day 1: arthrotomy with irrigation and drainage A total of 6 irrigations on the left hip joint
Special procedures during the course of treatment	Hospitalisation day 4: extensive capsular fenestration with irrigation and the removal of the abscess on the dorsal acetabulum with the insertion of a gentamycin sponge	None	Hospitalisation day 41: flushed the joint from an anterolateral approach and punctured and flushed the bony abscess from a dorsal approach using a strong Jamshidi needle
Hospitalisation day of surgery	1 and 4	2	1, 5, 18, 20, 24 and 41
Microorganism characteristics			
Microorganism	*Fusobacterium nucleatum*	Most likely *F. nucleatum* (see polymerase chain reaction row)	*Fusobacterium necrophorum*
Blood culture	Hospitalisation day 1: only aerobes – negative Hospitalisation day 7: aerobes and anaerobes – negative	Not carried out	Positive after 1 day of incubation

Culture of local tissue/fluid	Negative	Negative	*F. necrophorum* en masse
Polymerase chain reaction	Positive	100 % match with the GenBank sequences for *F. nucleatum*, *Fusobacterium animalis* and *Fusobacterium vincentii*	*F. necrophorum*; a 333 base pair sequences showed a 100% match with GenBank sequence pf058913
Time until microorganism became known	21 days	11 days	1 day
Antibiotic therapy			
Calculated	Cefuroxime intravenous for 5 days Ceftriaxone and clarithromycin intravenous for 16 days	Clindamycin and ampicillin–sulbactam intravenous for 8 days Ampicillin–sulbactam intravenous for 8 days	Piperacillin/tazobactam + clindamycin intravenous
Targeted (mainly)	Clindamycin intravenous for 9 days Clindamycin oral for 2 weeks	Clindamycin oral/4 weeks	Hospitalisation days 2–8: meropenem, vancomycin and clindamycin intravenous Hospitalisation days 8–16: ampicillin–sulbactam intravenous Hospitalisation days 16–37: meropenem and vancomycin Hospitalisation days 37–60: clindamycin intravenous Hospitalisation days 60–73: meropenem, vancomycin and metronidazole After discharge: meropenem, vancomycin and metronidazole intravenous for 8 days, followed thereafter by metronidazole oral for 3 weeks
Outcome/follow-up			
Days in hospital	29	17	73
Follow-up (months)	17.7	6.1	3.7
Last clinical findings	No restricted range of motion and no complaints	No restricted range of motion and no complaints	Restricted hip rotation; otherwise, no complaints

Last radiological findings	Magnetic resonance imaging: residual post-inflammatory structural irregularities in the dorsocranial right acetabulum; no florid inflammatory changes in the pelvis and hip joints; no femoral head necrosis	Magnetic resonance imaging: almost complete regression of the previously extensive inflammatory-abscessing bone marrow changes in the right acetabulum with still minor, reactive changes; no florid osteomyelitis; no abscesses	X-ray: narrowing of the joint space, consistent with secondary arthrosis; dense bone structure of the left femoral head, most likely indicative of femoral head necrosis.