

Table 1. Predisposing conditions for NJI in adults (other than recent joint procedures). *P*-value, males cf females.

Condition ^a	Adults (≥18 years) N=259	Male N=174	Female N=85	<i>P</i> -value
Osteoarthritis	69 (27)	39 (22)	30 (35)	0.03
Ischemic heart disease	35 (13.5)	25 (14)	10 (12)	0.7
Immunosuppressive therapy ^b	32 (12)	15 (8.5)	17 (20)	0.01
Diabetes mellitus type 2	30 (12)	21 (12)	9 (10.5)	0.8
Blunt trauma to joint	27 (10)	22 (12.5)	5 (6)	0.1
Chronic renal failure	25 (10)	18 (10)	7 (8)	0.7
Crystal arthropathy ^c	20 (8)	15 (8.5)	5 (6)	0.6
Heart failure	18 (7)	15 (8.5)	3 (3.5)	0.2
Psoriasis	16 (6)	12 (7)	4 (5)	0.6
Rheumatoid arthritis	16 (6)	6 (3)	10 (12)	0.01
Alcohol abuse	12 (5)	8 (4.5)	4 (5)	1
Chronic liver disease ^d	11 (4)	6 (3)	5 (6)	0.3
Malignancy ^e	11 (4)	7 (4)	4 (5)	0.8
Injection drug use	9 (3.5)	4 (2)	5 (6)	0.2
Psoriatic arthritis	7 (3)	2 (1)	5 (6)	0.04
Polymyalgia rheumatica	4 (1.5)	1 (0.5)	3 (3.5)	0.1
HIV	1 (0.4)	0	1 (1)	0.3

Data are no/No (%). *P*-value compares males and females, bolded where statistically significant.

^aTotal number of cases with predisposing conditions: 212 adults, some patients had >1 condition.

^bSome patients were taking >1 immunosuppressive drug; Methotrexate 15, glucocorticoids 25, Sulfasalazine 1, Hydroxychloroquine 1, Mycophenolic acid 1, Etanercept 1, Infliximab 3, other chemotherapeutic agents for cancer: 3.

^cGout 17 cases, calcium pyrophosphate disease 3 cases.

^d Nine patients had hepatitis C, two patients had both hepatitis C and B, three patients had cirrhosis.

^e Solid tumors 6 cases, hematologic malignancy 5 cases.

Table 2. Empiric and definitive antimicrobial therapy for septic arthritis in Iceland 2003-2017

Antibiotic ^a	Children (<18 years)		Adults (≥18 years)	
	Empiric therapy	Definitive therapy	Empiric therapy	Definitive therapy
Cloxacillin	33/40 (82.5)	24/40 (60)	166/256 (65)	127/250 (51)
Cefuroxime	4/40 (10)	5/40 (12.5)	0	0
Cefazolin	1/40 (2.5)	2/40 (5)	24/256 (9)	22/250 (9)
Vancomycin	0	0	18/256 (7)	25/250 (10)
Penicillin	1/40 (2.5)	2/40 (5)	16/256 (6)	29/250 (12)
Ceftriaxone	0	3/40 (7.5)	14/256 (6)	29/250 (12)
Clindamycin	0	2/40 (5)	11/256 (4)	9/250 (4)
Ampicillin	1/40 (2.5)	0	4/256 (2)	6/250 (2)
Other ^b	0	2/40 (5)	3/256 (1)	10/250 (4)
Total ^c	40	40	256	257

Data are no/No (%).

^a Information on empiric therapy and definitive therapy was available in all children and 99% (256/259) and 96,5% (250/259) of adult cases respectively.

^b Definitive therapy: Amoxicillin-clavulanate 1, ceftazidime 2, ciprofloxacin 6, imipenem 1, linezolid 2, rifampicin 1 case (used with ceftriaxone).

^c In seven adult cases 2 antibiotics met criteria for definitive treatment.

Table 3. Treatment and outcome for septic arthritis in Iceland 2003-2017. *P*-value, children cf adults.

Treatment	Children (<18 years)	Adults (≥18 years)	<i>P</i> -value
Duration of parenteral therapy (days) ^a	13.5	29	p<0.0001
Surgical management:			
Closed needle aspiration	6/40 (15)	205/259 (79)	p<0.0001
Open or arthroscopic surgery	15/40 (37.5)	107/259 (41)	p=0.7
Outcomes:			
Relapse	0	12/259 (4.6)	-
Amputation ^b	0	2/259 (0.8)	-
DROM ^c	9/36 (25)	133/175 (76)	p<0.0001
Insertion of prosthetic joint ^d	0	24/259 (9)	-
30-day mortality	0	14/259 (5.4)	-

Data are no/No (%). *P*-value compares children and adults, bolded where statistically significant. Median values are shown for duration of parenteral treatment.

^a Information concerning the length of intravenous treatment was noted in 81% (241/299) of all cases. Adults: IQR=21–42 days, children: IQR=10–28,5 days

^b One patient had a history of diabetes with chronic leg ulcers and the other a history of peripheral vascular disease with an infected femoropopliteal bypass.

^c DROM: decreased range of motion at discharge or first follow up appointment. Information was found in 67.5% of adult cases (175/259) and 90% of children (36/40).

^d Average time from diagnoses to insertion of prosthetic joint was 3,5 years, median time 2,5 years. All were placed within 9 years of infection.

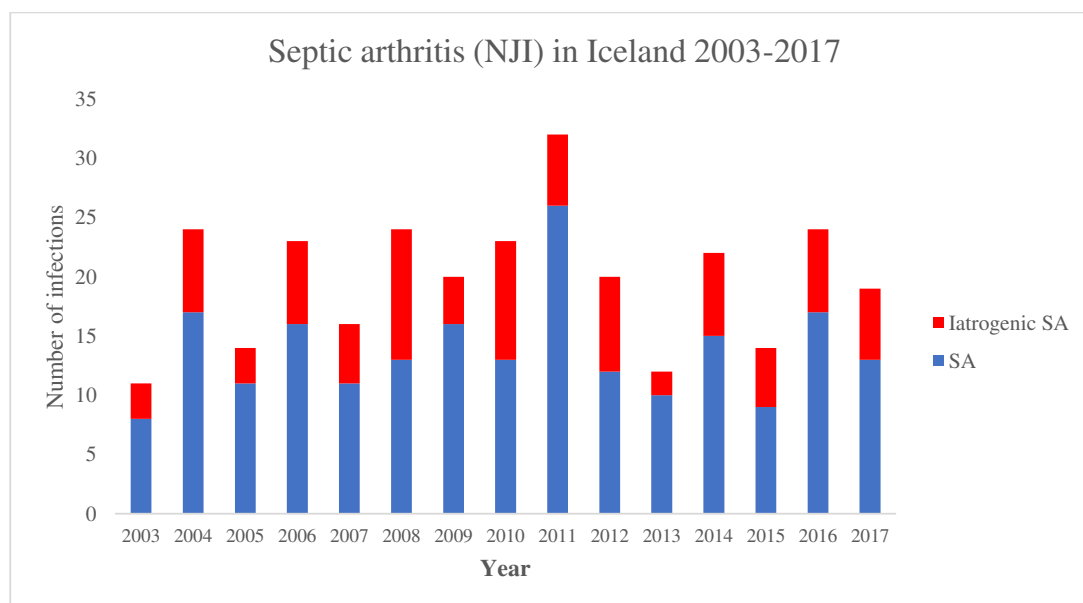


Figure 1: Iatrogenic infections as part of the total number of joint infections per year. SA: septic arthritis.

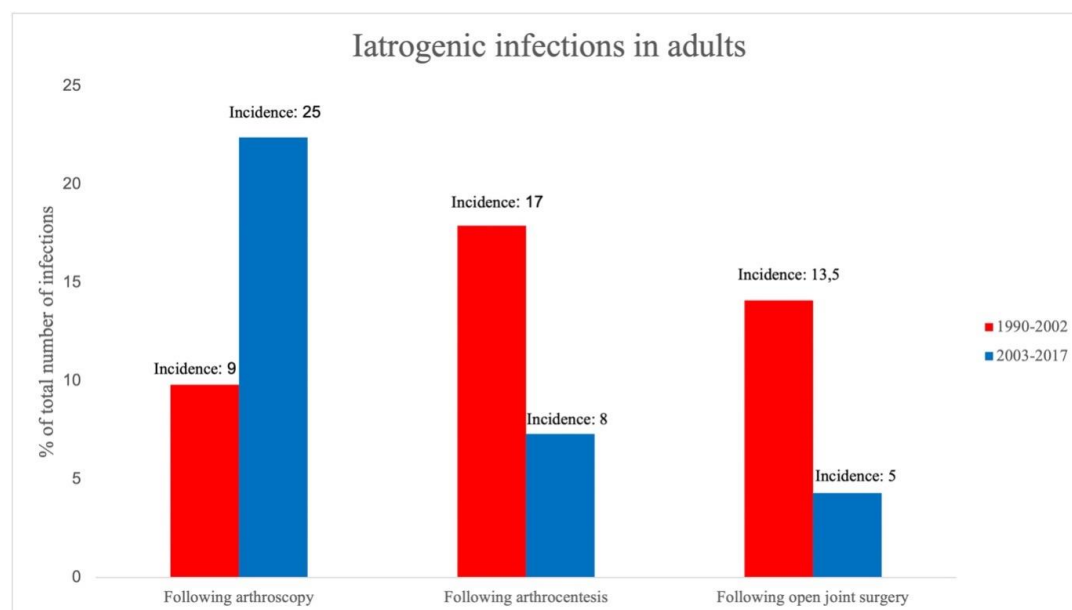


Figure 2: Comparison of iatrogenic infections in Iceland, 1990-2002 and 2003-2017. Incidence numbers are shown above each column as per 100.000 residents per year.