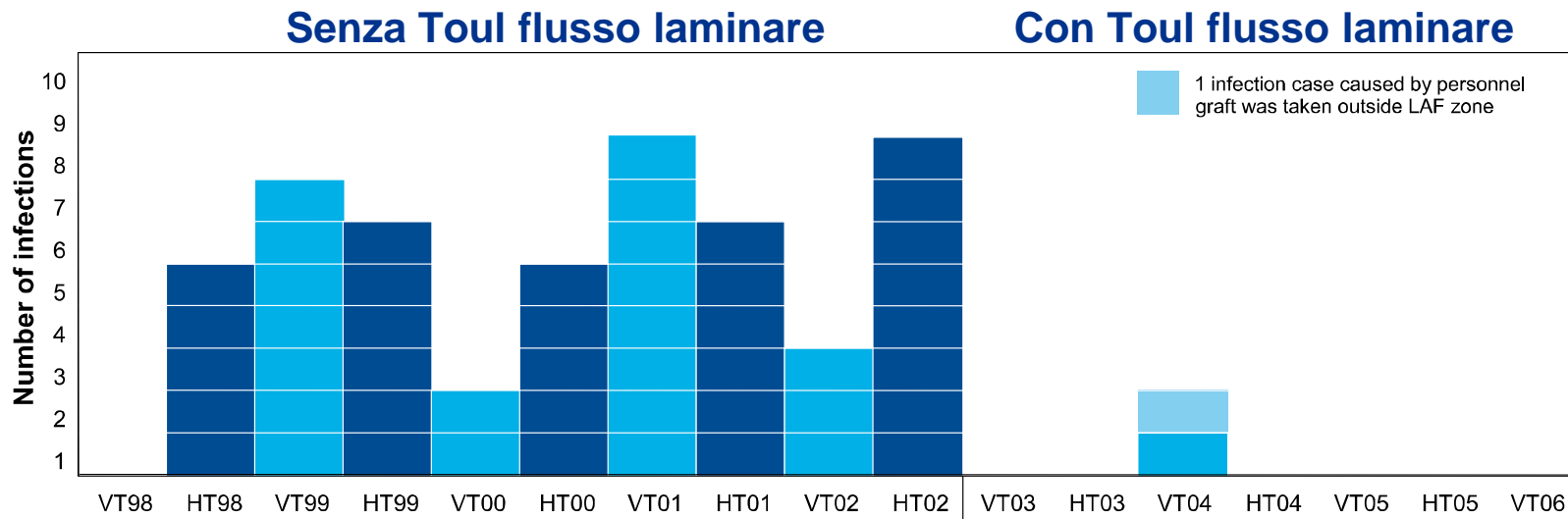


In Svezia utilizzano Toul flusso mobile laminare da diversi anni e sono riusciti a ridurre il tasso di infezione postoperatorio sotto lo 0,5%, con un notevole risparmio per l'ospedale.

In Italia, secondo l'Istituto Superiore di Sanità, il tasso di infezioni ospedaliere varia da 5 a 10%.

Statistics from Samariterhemmet, part of Uppsala University Hospital during 8 years of cruciate ligament construction operations



Normal ventilation

Number of X-band reconstructions

Year	1998	1999	2000	2001	2002
Amount					108

With Toul 400 & 300 Laminar airflow unit

Number of X-band reconstructions

Year	2003	2004	2005	2006
Amount	94	113	129	



Ospedale Telge Ortopedia, Södertälje Svezia

920 interventi con Toul flusso laminare (Protesi di ginocchio, Artroscopia, Osteosintesi)

Senza infezione



Samariterhemmet, Uppsala University Hospital, Sweden



TOUL technique at Samariterhemmet, Uppsala University Hospital

The reason we tested and subsequently purchased the Mobile Laminar Flow Unit from TOUL Meditech AB was that during 2002 we experienced an unacceptably high level of postoperative infections after cruciate ligament reconstruction. (see app. 1)

Air sampling in our five operating theatres showed high bacteria counts (CFU's- colony forming units).

We had to face the prospect that we would have to close down all orthopaedic surgery. Alternatively, we would have to invest in new ventilations system, which we found to be economically impossible.

We then came across information regarding TOUL Laminar Air Flow Unit, which we borrowed for trials. The results were excellent, so we then rented and subsequently purchased two mobile units and a TOUL instrument trolley.

We have successfully used these units for the last 36 months and our postoperative infections rate after cruciate ligament reconstruction is less than 1%. (see app. 1)

Our experience has been that TOUL Laminar Air Flow Unit has been an economical solution to our problem. They are easy to use and very efficient. We now operate five standing units and two instrument trolleys.

I confirm that I have no commercial interest in TUOL Meditech and that I receive no economical rewards for providing this information.

Göran Angergård
Chairman, Department of Dry surgery, Uppsala University Hospital



Ospedale Motala , Svezia (Orthopaedic center for Östergötland county)

Primary partial hip prosthesis with cement

Primary total hip without cement

Primary total hip with hybrid technology

Primary total hip without cement

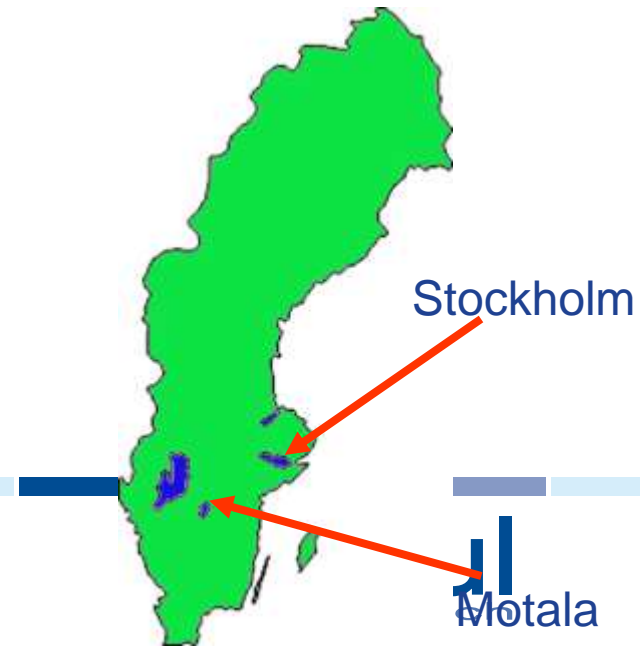
Primary partial knee with cement

Primary total knee with cement



Totale: 295 interventi con Toul

Senza nessuna infezione



UFC/m³ = unità formanti colonia per metro cubo d'aria



0 UFC nella ferita chirurgica
Nessun rischio di infezione



9 UFC nella ferita chirurgica –
Alto rischio di infezione



1 UFC nella ferita chirurgica
basso rischio di infezione



30 UFC nella ferita chirurgica –
Altissimo rischio di infezione!!

**VALORI DI CONTAMINAZIONE MICROBICA:
IN PROSSIMITA DEL TAVOLO OPERATORIO (UFC/m³)**

FLUSSI TURBOLENTI	FLUSSI LAMINARI	Con Toul
<p>50-200 UFC/m³ (dipende dalle persone presenti e dalla durata dell'intervento)</p>	<p>≤ 20 UFC/m³ (dipende dalle persone presenti e dalla durata dell'intervento)</p>	<p>< 5 UFC/m³</p>



SUL TAVOLO PORTAFERRI (UFC/m³)

FLUSSI TURBOLENTI	FLUSSI LAMINARI	Con Toul Portaferrì
<p>50-200 UFC/m³ (dipende dalle persone presenti e dalla durata dell'intervento)</p>	<p>≤ 20 UFC/m³ (dipende dalle persone presenti e dalla durata dell'intervento)</p>	<p>< 1 UFC/m³</p>



Karolinska, Svezia (tumore all'anca)



Intervento n.	Risultato UFC/m3
L1	<1
L2	<1
L3	<1
L4	1
L5	<1
L6	50 *
L7	<1

***Unità TOUL spenta**

Södersjukhuset, Sweden



**Surgical Operations, 21st of April 2005
– to 27 th of April 2005**

Intervento n.	Risultato UFC/m3
Operation 1	0,5
Operation 2	1
Operation 3	0
Operation 4	1,5
Operation 5	0
Peripheral Area	233 (99- 383)

Senza Toul