**SA***: S. aureus*; **MRSA:** methicillin-sensitive *S. aureus*; **MSSA:** methicillin-resistant *S. aureus*; **SSI:** surgical site infection; **+ve***:* positive; **-ve**: negativa

**Fig. 1** *Staphylococcus aureus* Surgical site infection of the enrolled patient groups with and without screening and decolonization protocol

(400) patients scheduled for major orthopaedic surgical procedures

**Intervention group**

(250)

**Control group** (150)

**+ve *SA***

(70)

*()*

**MRSA**

(12)

**MSSA**

(58)

**1**

MSSA(0)

MRSA(1)

Intervention period between December 2013-December 2014

*SA*. SSI

**5 (3.3%)**

MSSA(3)

MRSA(2)

**-ve *SA***

(180)

*()*

**2**

MSSA(2)

MRSA(0)

**3 (1.2%)**

MSSA(2)

MRSA(1)

**+**