[O107] MONITORING THE INCIDENCE OF PROSTHETIC JOINT INFECTIONS IN A COMPLICATION REGISTRY

Tina Wik[1], Olav Foss[1], Jomar Klaksvik[1], Siri Winther[1], Eivind Witso[1]

[1]St Olavs Hospital, Trondheim, Norway

Aim: The incidence of prosthetic joint infections can be severe to monitor, as they are rare events. Recent publications from National registries points toward a significant underestimation of reported infections. The aim of this project was to develop a complication register that could report the "true" and momentaneous incidence of prosthetic infections after total knee and hip arthroplasty.

Method: All patients operated with total hip arthroplasty (THA) or total knee arthroplasty (TKA) at our hospital were included in a local quality registry. All complications were reported at follow-up at 2 and 3 months for total knee and hip arthroplasties respectively, and at 1-year follow up. Both primary and revision surgeries were included. In order to monitor complications of special interest, such as deep postoperative infections, key variables were presented in a g-chart. This chart shows the number of uncomplicated surgeries between each complication (such as infection) in a bar diagram. This diagram is easily read as high bars indicate a low incidence of complications and low bars indicate a high incidence. The diagram is updated and distributed for information every month.

Results: From September 2010 till December 2015 we included 2093 primary total hip arthroplasties and 272 hip revisions. The overall incidence for prosthetic infection after primary THA within 1 year after surgery was 1.8% and for hip revisions 3.4%. The momentaneous incidence in December 2015 was 3% for both primary and revision THA together. In the same period 1555 total knee arthroplasties and 155 knee revisions were included. The overall incidence of prosthetic infection after primary TKA within 1 year after surgery was 1.2% and for knee revisions 2.2%. The momentaneous incidence in December 2015 was 2.5% for primary and revision TKA together.

Conclusions: Reporting the number of uncomplicated surgeries between every unwanted event or complication, such as postoperative infections, is a good method for describing rare events. This method will reveal changes in the trend at an earlier stage and can be an important tool in the work on preventing postoperative infections. A local quality register can be important in order to report a "true" incidence of postoperative infections, as the risk of underestimation is lower than in a national registry.