

# COMMENTS ON THE ARTICLE: "AGENTS RELATED TO THE SURGICAL SITE INFECTION OF POSTOPERATIVE ELDERLY PEOPLE AT EL CENTRO MEDICO NAVAL" 2013-2017"

COMENTARIOS SOBRE EL ARTÍCULO: "AGENTES RELACIONADOS A INFECCIÓN DE SITIO OPERATORIO EN ADULTOS MAYORES POS OPERADOS EN EL CENTRO MÉDICO NAVAL, 2013 – 2017"

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LETTERS TO THE EDITOR

## Mr. Editor

After reading this article with interest published by Hidalgo et al<sup>1</sup> regarding agents related to the surgical site infection (SSI) in elderly between the years 2013 and 2017; we found the consideration of certain relevant determinants related to clinical and surgical aspects. These determinants are useful since they are taken as reference in future research work. Nevertheless, we would like to emphasize the necessity to incorporate some other relevant variables as possible determinants to control such as those related to nutritional status specifically hemoglobin and preoperative albumin levels since in our country this kind of pathologies is common.

In different countries<sup>2</sup>, SSI is one of the most deadly and costly complications increasing mortality from 2 to 11 times<sup>3</sup> and the cost to 14.2 million dollars in surgeries<sup>4</sup>. In Peru, from 15 000 nosocomial infections, 30, 9 % are from an surgical wound<sup>5</sup>. It is important to know the details of this theme because it contributes to a highly reversible social and economic problem.

The nutritional status of the elderly is vital to keep an adequate immune response<sup>6</sup>. A common alteration is anemia, a frequent public health problem in underdeveloped countries such as Peru<sup>7</sup>. It constitutes a significant risk factor that can increase the person fragility<sup>8,9</sup> and thus increase a SSI development likelihood<sup>10</sup>. As evidenced by the study of Atalaya Marín in which from 49.5% of anemic patients, 67.9% present post-surgical complications in which the SSI stands out<sup>11</sup>.

On the other hand, albumin values are in general very useful for determining the patient's nutritional status as it is available in hospitals<sup>12</sup>. Poor albumin levels have been related to patients with scarring alterations due to altered collagen synthesis and thus it prevents granuloma formation in surgical wounds predisposing to bacterial contamination in the hospital environment<sup>13</sup>. Although it is known that albumin is reduced in acute phase response, conclusions cannot be drawn as to whether preoperative prealbumin levels could predict an infection development<sup>14</sup>. In spite of this, different studies have described that albumin deficiency increases the SSI risk up to 12.6 times more<sup>13</sup>. Furthermore, it is stated that patients with postoperative serum albumin values <3.5 g / dL have a significantly higher risk of SSI mortality.

Even though the Peruvian state is dealing with malnutrition, it is necessary to intensify efforts to prevent these types of complications, which are socially and economically damaging. We believe it is necessary to emphasize the person's nutritional status as a risk factor to develop SSI in future work to be developed.

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