INTRODUCTION
Albumin is the name used to describe proteins readily soluble in water and coagulate by heating. The most abundant protein found in the serum is albumin in humans. Albumin is the key transporting medium i.e. it helps to transport the hydrophobic substances from the blood stream. The normal serum level is 3.2-5.1g/dL. It forms 56% of the total protein. Anything below 2g/dL is known as hypoalbuminemia.

The aim of the study is to find out the pre-operative serum level and try to find out the complications associated with hypoalbuminemia and surgical complications. The study was done in KVG Medical College, Sullia. Seventy five patients were selected irrespective of the sex and divided into three groups based on the age. In the present study it is very clear that the serum albumin reflects the overall outcome of the surgery. As the age progresses the amount of hypoalbuminemia encountered is high. The amount of hospital stay also depends on the protein level. Albumin is no doubt the healer protein of the body. As the albumin level decreases the complications faced by the patients drastically increases.

KEYWORDS
Albumin, Marker, Surgery, Serum.

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AIMS AND OBJECTIVES: To find out the pre-operative serum level and try to find out the complications associated with hypoalbuminemia and surgical complications.

MATERIALS AND METHODS: The study was done in KVG Medical College, Sullia. Seventy five patients were selected irrespective of the sex and divided into three groups based on the age.

Group 1: Consisted of patients aged below 25.
Group 2: Consisted of patients aged between 25 to 50.
Group 3: Consisted of patients aged above 50.
Serum was collected one hour before surgery and the serum albumin level was estimated.

Based on the albumin level they were further divided into three groups.

Group A the serum level of albumin was considered to be more than 4.

Group B the serum of albumin was considered to be 2-4.

Group C the serum level was taken to be less than 2.

The study was conducted for a period of two years from May 2013 to May 2015.

RESULTS:

| Group 1 | A (>4) | B (2-4) | C (<2) |
|---------|--------|---------|--------|
| Frequency | 18 | 5 | 2 |
| Complications | NIL | Intra-operative: Bleeding:1 Post-operative sepsis: Nil | Intra-operative: Bleeding:2 Post-operative sepsis: 1 |
| Number of hospital stay (Mean) | 7.45 | 16.22 | 21.71 |

Table 1: Group 1 statistics

| Group 2 | A (>4) | B (2-4) | C (<2) |
|---------|--------|---------|--------|
| Frequency | 11 | 11 | 3 |
| Complications | NIL | Intra-operative:: Bleeding: 1 Post-operative sepsis: Nil | Intra-operative:: Bleeding: 1 Post-operative sepsis: 1 |
| Number of hospital stay (Mean) | 6.44 | 18.7 | 21.82 |

Table 2: Group 2 statistics

| Group 3 | A (>4) | B (2-4) | C (<2) |
|---------|--------|---------|--------|
| Frequency | 9 | 9 | 7 |
| Complications | NIL | Intra-operative:: Bleeding: 2 Post-operative sepsis: 1 | Intra-operative:: Bleeding: 2 Post-operative sepsis: 2 |
| Number of hospital stay (Mean) | 8 | 20.22 | 26.44 |

Table 3: Group 3 statistics

DISCUSSION: Since organic defense decrease and malnutrition were recognized as potential factors for higher morbidity and mortality rates in the postoperative period, many studies have dealt with the early detection of immunosuppression and malnourishment in surgical patients. Malnourished patients are at higher risk of postoperative complications and death, if compared to well-nourished patients submitted to similar surgeries. Besides, nutrition therapy has improved clinical prognosis and quality of life.

In the present study it is very clear that the serum albumin reflects the overall outcome of the surgery. As the age progresses the amount of hypoalbuminemia encountered is high. The amount of hospital stay also depends on the protein level. Albumin is no doubt the healer protein of the body. As the albumin level decreases the complications faced by the patients drastically increases.

The study is in agreement with that of other studies of Luiz Ronaldo Alberti, Andy Petroianu and Donald A Redelmeier.

CONCLUSION: Finding serum albumin level preoperatively can be used as a marker for the surgical outcomes.

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