



## A CLINICAL STUDY ON AMPUTATIONS IN GENERAL SURGERY

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## KEYWORDS :

## INTRODUCTION:

Amputations is the Post graduates first case in the beginning and is one of the most ancient of all surgical procedures done for several indications, including trauma, peripheral vascular disease, tumor, diabetic foot infection and congenital anomalies.<sup>1,2,3</sup> Some times limb amputation is considered the last resort when limb salvage is impossible or when the limb is dead or dying, viable but non- functional or endangering the patient's life.<sup>4</sup>

## AIM OF THE STUDY:

This study was conducted to determine the pattern, indications and short-term complications of major limb amputations in our setting.

## METHODOLOGY:

A prospective Observational study done in 30 patients selected by Systemic Random Sampling Technique in the department of General Surgery NMC Nellore during the period from February 2019 to February 2020. History, clinical examination, investigations, management details were recorded and analysed for the study purpose.

## RESULTS :

Table no 1: Age distribution of the cases

Age in years	No of cases	Percent
21-30	6	20
31-40	10	33.3
41-50	8	26.4
51-60	4	13.3
>60	2	6.7
Total	30	100

Table No 2: Indications for amputations

Indications for amputations	No of cases	Percent
Peripheral vascular Disease	9	30
Diabetic foot infections	10	33.3
RTA including Electrical burns	7	23.3
Malignancies (STS, SCC, Marjolins, Verrucus ca)	4	13.4
Total	30	100

Table No 3: Age group versus indications

Age in years	PVD	RTA	Malignancy	Diabetic Infections
21-30		6		
31-40	6	1		3
41-50	2			6
51-60	1		2	1
>60			2	
Total	9	7	4	10

Table No 4: Levels of amputations

Type of Amputation	No of cases	Percent
Below Knee	12	40
Above Knee	7	23.3

Fore foot	4	13.4
Below Elbow	3	10
Above Elbow	1	3.3
Symes	3	10

Table No 5: Post operative complications

Complications	No of cases	Percent
Revision amputation	4	13.3
Pain full stump	1	3.3
Second surgery	3	10
Mortality	2	6.7

## DISCUSSION -

In our study we noticed that majority of the cases were in 31-40 years, RTA cases were more in 21-30 years, PVD cases were more in 31-40 years, Diabetics were common in 31- 40 and 41-50 years, malignancies like SCC, STS and Ulcer cancers were common in elderly age group >50 years.

Males account for 17 cases and females were 13 cases. male preponderance among present study coincides with the other studies.<sup>5,6,7</sup>

Among the indications for amputations diabetic foot infections was the common indication, followed by PVD, RTA including electrical burns, malignancy. A similar pattern was also seen in the West where Pohjolainen & Alaranta<sup>8</sup> reported that 49% of amputations in Finland resulted from diabetic complication. The risk of amputation in diabetic patients is increased up to 15 fold.<sup>9</sup>

Patients in the study had a maximum of BK amputation, followed by AK. Electrical burns and upper limb PVD had upper limb amputations. Similar results were seen in with other studies.<sup>1,5</sup>

Post operatively 4 cases 3 PVD and 1 Diabetic infections needed revision surgery, 1 patient had pain at the scar site, 3 cases needed second surgery like split skin grafting, secondary suturing, etc. A case of PVD and SCC were died. Complications of diabetic foot ulcers were the most common indication for major limb amputation in our study, followed by trauma and peripheral vascular diseases. The complication rate in our study is lower compared with that of Essoh et al.<sup>5</sup>

## CONCLUSION:

Complications of diabetic foot ulcers and trauma resulting from road traffic crashes were the most common indications for major limb amputation in our environment. The majority of these indications are potentially preventable through provision of health education, early presentations and adequate treatment of these conditions.

## REFERENCES:

1. Umaru RH, Gali BM, Ali N: Role of inappropriate traditional splintage in limb amputation in Maiduguri, Nigeria. Annals of African Medicine 2004, 3

- (3):138-140.
2. Magee RA: Amputation through the ages the oldest surgical operation. *Aust NZ Surg* 1998, 68:675-678.
  3. Olalorun DA: Amputation in general practice. *Niger Postgrad Med J* 2001, 8:133-135.
  4. Paudel B, Shrestha BK, Banskota AK: Two faces of major lower limb amputations. *Kathmandu University Medical Journal* 2005, 3(11):212-216.
  5. Essoh JB, Bamba I, Dje Bi Dje V, Traore A, Lambin Y: Limb amputations in adults in an Ivorian Teaching Hospital. *Niger J Ortho & Trauma* 2007, 6(2):61-63
  6. Nwankwo OE, Katchy AU: Surgical limb amputation: a fiveyear experience at Hilltop orthopaedic hospital Enugu, Nigeria. *Nig J Orthop Trauma* 2004, 3:139-149
  7. Jenyo MS, Diya KS, Olakulehin OA: Limb amputations in Osogbo, Nigeria. *Afr J Trauma* 2004, 2:80-82
  8. Pohjolainen T, Alaranta H: Epidemiology of lower limb amputees in Southern Finland in 1995 and trends since 1984. *Prosthet Orthot Int* 1999, 23:88-92.
  9. Payne CB: Diabetes-related lower limb amputations in Australia. *Med J Australia* 2000, 173:352-4.