

## A CLINICAL STUDY ON LOWER LIMB AMPUTATION IN SVMC TIRUPATHI

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### ABSTRACT:

**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>

Sometimes 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 is to determine the pattern, indications and short-term complications of major limb amputations in our setting. **Methodology:** An observational study done retrospectively on 50 cases of amputations in the last one year period in the Department of General Surgery, Sri Venkateswara Medical College, Tirupati. History, clinical examination findings in the case sheets, investigations, management and complications noted in the case sheets were recorded and analyzed for the study purpose. **Results:** Maximum patients were in age group 41- 50 years and Diabetic Foot Infection was found to be the most common indication for amputation. Below knee amputations were commonly done and revision of stump was done for many cases and infection of the stump was the commonest complication encountered. **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.

**KEYWORDS:** Amputation, Diabetic Foot Ulcer, Stump Infection

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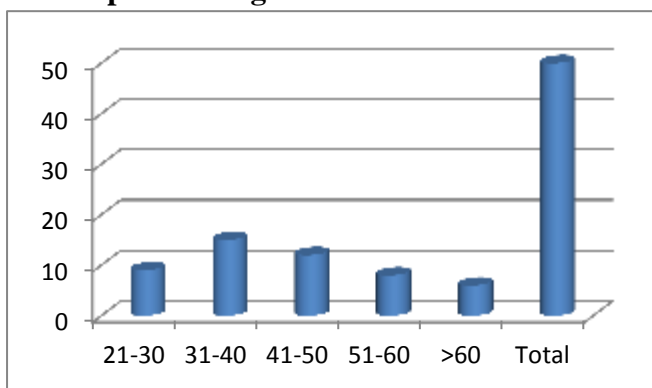
management and complications noted in the case sheets were recorded and analyzed for the study purpose.

**Results:**

**Table no 1: Age distribution of the cases**

Age in years	No of cases	Percent
21-30	9	18%
31-40	15	30%
41-50	12	24%
51-60	8	16%
>60	6	12%
Total	50	100%

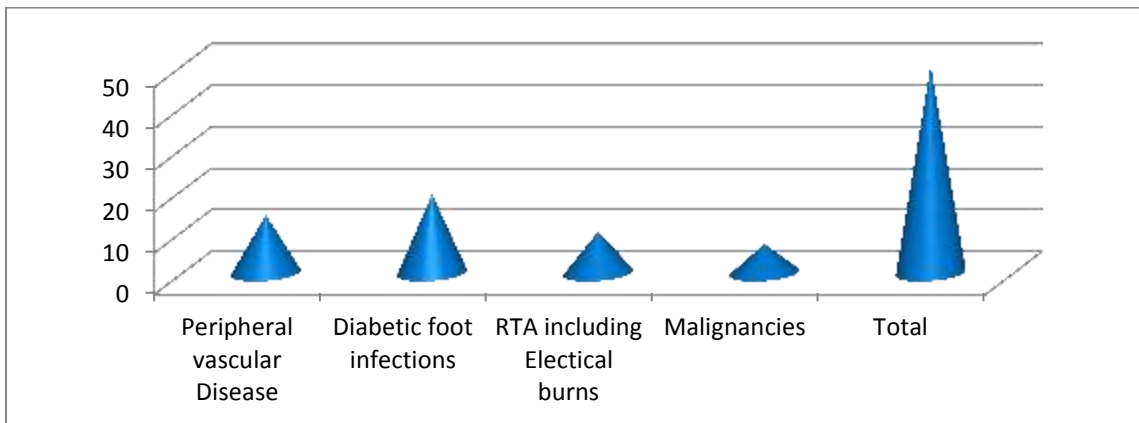
**Graph no 1: Age distribution of the cases**



**Table No 2: Indications for amputations**

Indications for amputations	No of cases	Percent
Peripheral vascular Disease	14	28%
Diabetic foot infections	19	38%
RTA including Electical burns	10	20%
Malignancies	7	14%
Total	50	100

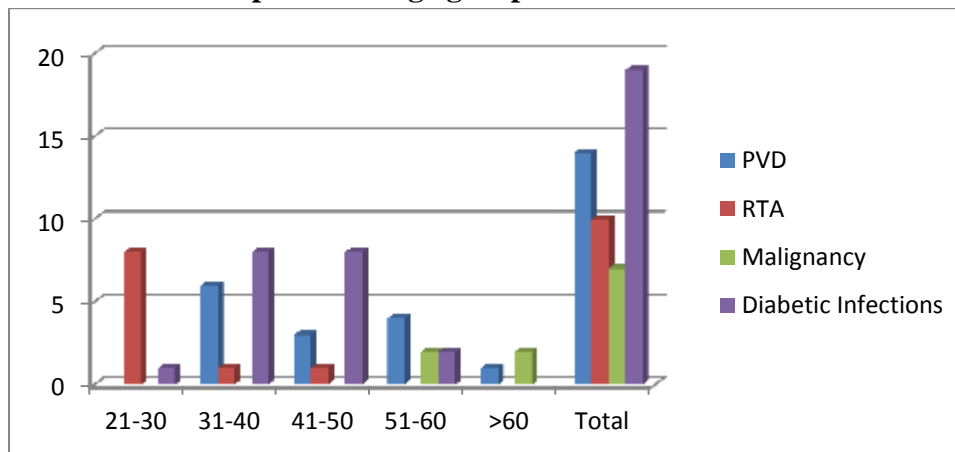
**Graph No 2: Indications for amputations**



**Table No 3: Age group versus indications**

Age in years	PVD	RTA	Malignancy	Diabetic Infections
21-30		8		1
31-40	6	1		8
41-50	3	1		8
51-60	4		2	2
>60	1		2	
Total	14	10	7	19

**Graph No 3: Age group versus indications**

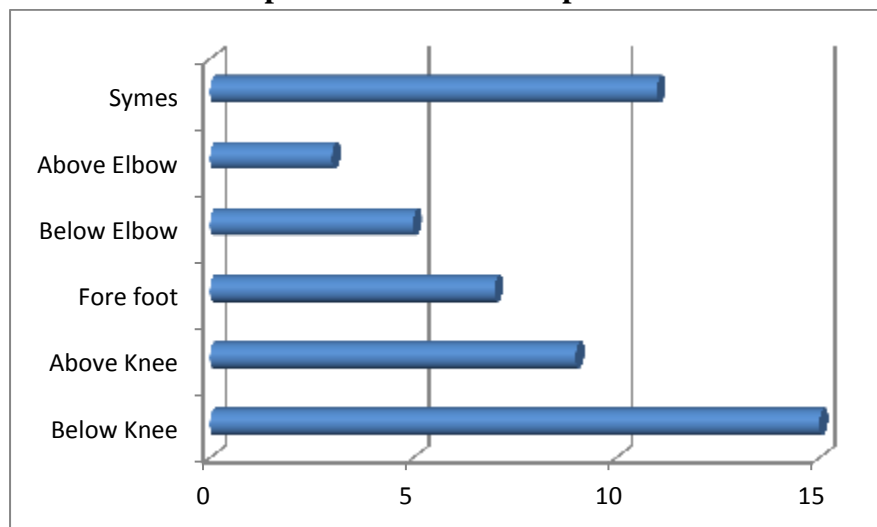


**Table No 4: Levels of amputations**

Type of Amputation	No of cases	Percent
Below Knee	15	30%
Above Knee	9	18%
Fore foot	7	14%
Below Elbow	5	10%
Above Elbow	3	6%

Symes	11	22%
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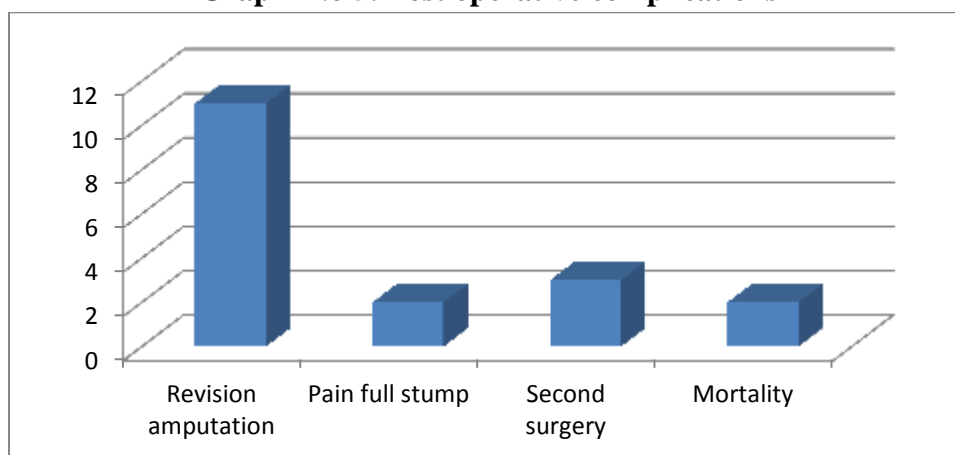
**Graph No 4: Levels of amputations**



**Table No 5: Post operative complications**

Complications	No of cases	Percent
Revision amputation	11	22%
Pain full stump	2	4%
Second surgery	3	6%
Mortality	2	4%

**Graph No 5: Post operative complications**



**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 37 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 11 cases 8 PVD and 3 Diabetic infections needed revision surgery, 2 patients had pain at the scar site, 3 cases needed second surgery like split skin grafting, secondary suturing, etc. A case of Diabetic foot Ulcer and electrical burns 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:**

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