



Surgery

OPERATIVE VASCULAR SURGICAL CONSULTATION DURING NON-VASCULAR SURGICAL INTERVENTIONS IN TERTIARY CARE CENTER

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ABSTRACT Iatrogenic arterial injuries may result from any invasive diagnostic or therapeutic procedure. many types of intraoperative consultation by vascular surgeon during non -vascular surgery provided as both emergency as well as elective manner. this study is to analyze current status of intraoperative vascular consultation in non-vascular surgery in a single center.

KEYWORDS : iatrogenic, vascular, non-vascular consultation

INTRODUCTION

There are many types of intraoperative consultation by vascular surgeon during non-vascular surgery. vascular surgeons are consulted to assist other surgical specialties for bleeding control, resection of anatomical complex tumor, vascular isolation, arterial and venous injury occurring during the procedure, unexpected post operative vascular complications. Importance of intraoperative vascular consultation during non-vascular surgery is understated. This study is to evaluate the current state of intraoperative consultation for non-vascular surgery at a single tertiary care center. we further sought to emphasize the role of vascular surgeon in support to other surgical services and their procedures.

MATERIALS AND METHODS

This is a retrospective analysis of vascular surgery consultation during non-vascular surgery from January 2019 to January 2021(36 months) at a single tertiary care center (madras medical college). We evaluate demographic data of patient age, sex, primary cause of consultation, department, procedure done by our team through our available medical records.

We had excluded primary vascular trauma cases, critical limb ischemia, other primary vascular diseases, av access related complications, and minor cases.

RESULTS AND DISCUSSION

Total no of emergency cases done by our department (For 3 years including major and minor)	1683(100%)
Other department major intraoperative assistance (excluding primary vascular injuries, Av access complications, minor procedures)	79 (0.5%)

Demography:

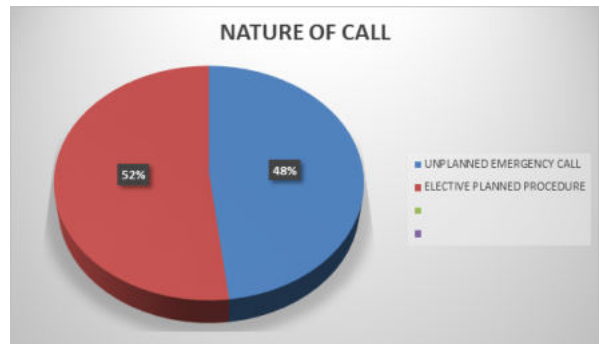
Male	50
Female	29

NATURE OF ASSISTANCE GIVEN

Unplanned emergency call attended	38
elective planned procedure	41

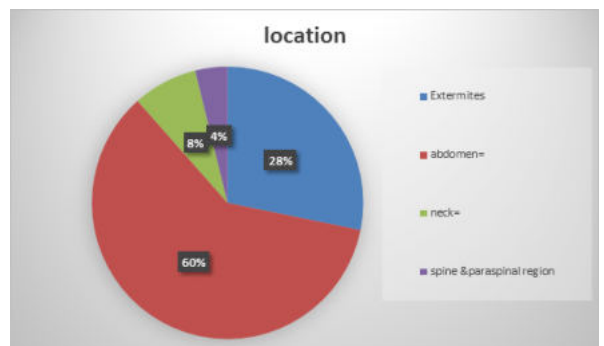
Location of the surgery:

Extremities	22
Abdomen	47
Neck	6
spine ¶spinal region	3



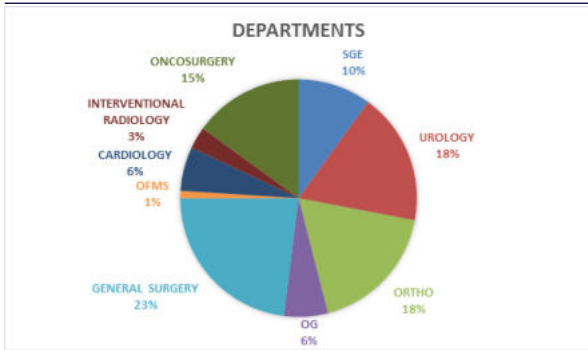
Departments:

SGE	10
UROLOGY	18
ORTHO	18
OG	6
GENERAL SURGERY	23
OFMS	1
CARDIOLOGY	6
INTERVENTIONAL RADIOLOGY	3
ONCOSURGERY	15
TOTAL	79



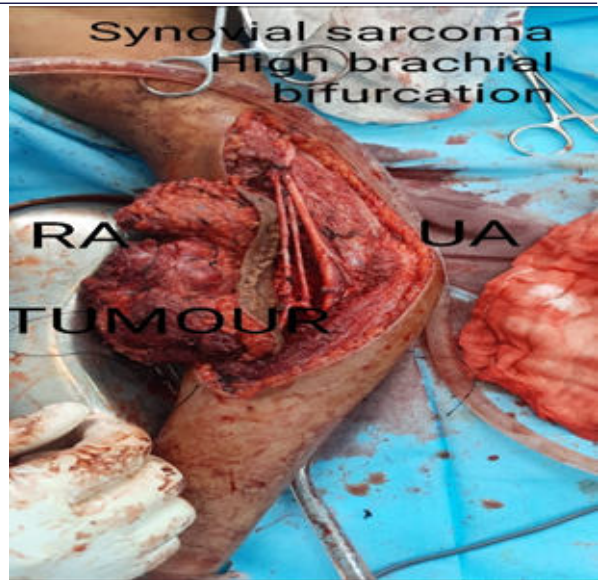
Procedure done:

Vascular exposure, isolation &control	21
Intra op hemorrhage evaluation	7
Exploration for Post op hemorrhage	9
Bypass,repair&reconstruction of vasculature	26
Ligation of the feeding vessel	6
Iatrogenic Foreign body retrieval	4
Transplant graft surveillance/post op exploration	6



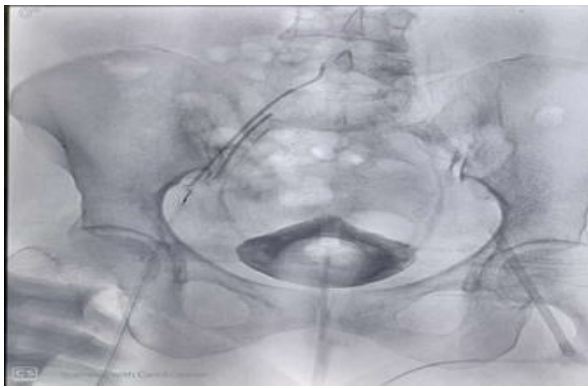
DISCUSSION

It has been primarily documented vascular surgeon perform relevant technique in emergencies to control hemorrhage. In addition their expertise in dissection around major arteries and veins and in reconstruction of major vessels can improve the like hood of success of R0 resection in cancer surgery using vascular reconstruction technique. This study provides quantitative data of vascular surgical involvement in non-vascular surgeries. The actual overall incidence of vessel injury during non-vascular surgery may be higher than our study. Our data demonstrate that the need for intraoperative vascular surgical expertise in support of other surgeons are urgent and unpredictable. The principal limitation of this study is that it was retrospective analysis based on data from a single center.



Vascular isolation and tumour removal

This study provides quantitative data of vascular surgical involvement in non-vascular surgery. It has been documented vascular surgeon perform relevant technique in emergencies to control hemorrhage. In addition, our expertise in dissection around major arteries and veins and in reconstruction of major vessel can improve the like hood of success of R0 resection in cancer surgery using vascular reconstruction technique.



In our data, we assisted 79 unplanned cases, as an emergency basis for the past 3 years. (Jan 2019 to dec2021). We assisted not only surgical departments but also non-operative departments (interventional radiology, cardiology. we did vascular exposure isolation and vascular repair either primary or bypass in most of the cases. We assisted general surgery (for intraop, post op hemorrhage exploration, intraop mesenteric ischemia evaluation =23/79), for ortho (anterior spinal exposure, vascular isolation and exposure=18/79) urology=(transplant, post-transplant complications=18/79). oncosurgery (vascular isolation, ontable vascular repair/reconstruction=15/79) cases. Other cases are ligation of feeding vessel (internal iliac artery ligation, external carotid ligation,) and major iatrogenic foreign body retrieval (guide wires, broken catheter retrieval done).



Retained catheter tip removal

Our data demonstrate that the need for intraoperative vascular surgical expertise in support of other surgeons is urgent and unpredictable.

CONCLUSION:

Our study shows vascular surgeon support in non-vascular departments in their operating room, and their contribution to the safety and success of surgical procedure under various situations.

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Transplant assistance