Clinical Highlights

A publication delivering concise clinical data

VASCULAR CLOSURE

Improving Productivity with the Angio-Seal™ Device

PRESENTED BY

Kathleen Copelen, RT(R)

Proctor Hospital
Peoria, IL

(Pictured back center)

INTRODUCTION

Proctor Hospital is a modern 250-bed medical complex offering state-of-the-art technology in cardiology and peripheral vascular services.

Proctor Hospital competes with two other hospitals in the area that are much larger and have the advantage of a location near cardiologists' offices. In order for Proctor to stay competitive and win its share of the cardiovascular market, it must keep pace with rapidly advancing medical technology and the growing demands of health care's "do more with less" aphorism.

The challenge for Proctor Cardiac/Peripheral Vascular Labs is to:

- Decrease room turnaround time
- Increase productivity
- Increase patient convenience and comfort
- Increase physician usage
- Provide cost-effective solutions
- Utilize employee and hospital resources to their full potential

HISTORY

In 1999, Proctor Hospital's Cardiac Cath Lab was running smoothly but showing no signs of growth. Lab turnaround time was averaging 45-50 minutes. Patient productivity was averaging about 57 patients per month. What Proctor needed was a way to improve turnaround time, increase productivity, improve physician satisfaction and look for ways to achieve even more patient satisfaction without capital expenditures. The solution needed to be easy, cost-effective and quickly obtained. For Proctor Hospital, this solution was the Angio-Seal™ Vascular Closure Device.

The Angio-Seal™ Device was first introduced to the lab in November 1999. Its usage was initially met with opposition from staff. They had concerns over the anchoring system and they were very loyal to VasoSeal.™ But it soon became clear that using VasoSeal™ was not reducing turnaround time in the lab. The lab was then further educated on how the Angio-Seal™ Device works and how the three components (anchor, collagen and positioning suture) are completely absorbable. After a product evaluation, Proctor's Cath Lab went into full swing with the 8F Angio-Seal™ Vascular Closure Device in February 2000. The results of the usage of this device were instantaneous.

ROOM TURNAROUND TIME

Proctor considers room turnover to be the time from the end of one case to the start of the next. Between January and July 2000 turnaround time was reduced by 59%. Comparing 1999 to 2000, our room turnover was its lowest yet, at 21.75 minutes.

Dr. John Rashid,Medical Director, Proctor Cardiac Cath Lab states, "Speaking for myself and my partners, the use of the Angio-Seal™ Device showed an immediate decrease of 10 to 15 minutes in turnaround time in our lab."

PRODUCTIVITY

With the reduction of turnaround time, lab productivity has increased. Patient volume has increased approximately 77% from the first of the year to the present. Procedure volume showed an impressive gain of 75%.

Proctor Cardiac Cath Lab's newfound efficiency and productivity resulted in a renewed sense of pride and accomplishment. Cardiologist and staff relationships grew stronger and administration began looking at providing the lab with its own area to prep and recover outpatients.

PHYSICIAN CONVENIENCE

The benefits of the Angio-Seal™ Device are significant. "The Angio-Seal™ Device quickly and effectively closes the femoral artery puncture and achieves hemostasis with no major complications. The Angio-Seal™ Device provides the patient a shorter recovery time. I receive fewer pages about patient discomfort, therefore providing me with more time to assist other patients," states Dr. S. Craig Kurtz, Cardiologist.

Dr. Kurtz continues, "the Angio-Seal™ Device has made a dramatic difference in patient post-procedure monitoring and early discharge. I have had several instances where I performed coronary angioplasty on a patient and they were discharged within a few hours."

Continued on back...

COST-EFFECTIVENESS

The key to the Angio-Seal™ Device's cost-effectiveness is the value it brings in effecting change within the clinical pathway. In order to effect change one needs to challenge the status quo. Point in fact: July 24, 2000 Proctor Hospital opened its Special Procedure Unit (SPU). This unit preps and recovers all outpatients, performs TEEs, cardioversions, tilt tables and IV therapies for both in- and outpatients. It is a six room, fully monitored area that provides patients with 'one stop shopping '. The patient comes directly to SPU from admitting. The patient is then prepped and sent directly into the cath lab for their procedure. After completion of the procedure the patient is returned to SPU, monitored, recovered, educated and released for home. The close proximity of the lab to the recovery area is good for patients, families and physicians. This unit would not have opened without the increase of productivity in the lab. The Angio-Seal™ Device helped produce the numbers needed to prove to administration the importance of such a facility.

"The Angio-Seal™ Device is a win-win situation for both patient and hospital. It's important for the hospital to provide high-quality care, maintain patient comfort, reduce patient stay time and still be cost-effective," says Kathleen Copelen, RT(R), Cardiac Cath Lab Supervisor. "The Angio-Seal™ Device's technology provides virtually instant hemostasis, helping the patient ambulate earlier and reducing patient stay times. Patients' complaints of back pain are almost eliminated, which results in a reduction in pain medication given. This saves the patient and hospital money."

The Angio-Seal™ Device closes the femoral artery puncture without time-consuming manual pressure or painful surgical suturing. This frees up cath lab personnel to set up for the next case, which in turn improves turnaround time and productivity.

DOMINO EFFECT

The domino effect of the Angio-Seal™ Device on the Proctor Cardiac Cath Lab has been impressive. In the past seven months, usage of the Angio-Seal™ Device has brought great results.

DOMINO EFFECT

USE OF THE ANGIO-SEAL™ DEVICE
↓
REDUCTION OF TURNOVER TIME
↓
INCREASED PHYSICIAN USAGE
↓
HIGHER PATIENT VOLUME
↓
HIGHER PRODUCTIVITY
↓
COST CONTAINMENT
↓
ADMINISTRATION APPROVAL TO OPEN SPECIAL PROCEDURE UNIT
↓
TEAM SENSE OF ACCOMPLISHMENT AND PRIDE

CONCLUSION

Proctor Hospital's Cardiac Cath Lab/Peripheral Vascular team, which consists of 4 RNs, 2 RT(R)s and 1 CVT, met and exceeded the challenges that faced them in the beginning of 2000. This team is responsible for one dedicated cardiac cath lab, one dedicated peripheral vascular lab and the Special Procedures Unit. The combination of a highly dedicated staff, Proctor Hospital's commitment to providing quality health care services to the community, and successful usage of the Angio-Seal™ Device is an inspiration to labs everywhere, especially smaller labs. The cardiac cath lab, which was once resistant to change, now enjoys the rewards of increased productivity.We constantly monitor patient and procedure numbers, conduct time studies on turnaround times and continue to learn about new technologies to serve patients better. Yes, it is possible to do more with less.

Global Headquarters
One St. Jude Medical Drive
St. Paul, MN 55117
USA
+1 651 756 2000
+1 651 756 4310 Fax

St. Jude Medical Europe, Inc.
The Corporate Village
Avenue Da Vinci Iaan, 11 - Box F1
B-1935 - Zaventem
Belgium
+32 2 774 68 11
+32 2 772 83 84 Fax

St. Jude Medical Brasil, Ltda.
Rua Frei, Caneca 1380-9° A-CJ91/92
Sao Paulo - SP - Brasil
CEP 01307-002
+55 11 5080 5400
+55 11 5080 5423 Fax

St. Jude Medical (Hong Kong) Limited
Unit 2701-07, COSCO Tower
Grand Millenium Plaza
183 Queen's Road
Central, Hong Kong
+852 2996 7688
+852 2956 0622 Fax

sjm.com

ST. JUDE MEDICAL
MORE CONTROL. LESS RISK.

Item 41302 Rev.-B