

POSTER TIPS

(Updated 2019)

General aim and format

- A poster is a graphically based approach to presenting research. In presenting your research with a poster, you should aim to use the poster as a means for generating active discussion of the research.
- Limit the text to about one-fourth of the poster space, and use "visuals" (graphs, photographs, schematics, maps, etc.) to tell your "story."

Design and layout specifications

- **The entire poster should consist of a printed page measuring 36" x 48".**
- The poster should be printed on appropriate quality paper to allow it to be displayed on a foam board.
- It must be oriented in the "landscape" position (long dimension is horizontal).
- A banner displaying your poster title, name, and department should be positioned at top-center of the board (see Figure 1).
- Make it obvious to the viewer how to progressively view the poster. The poster generally should read from left to right, and top to bottom. Numbering the individual panels, or connecting them with arrows is a standard "guidance system" (see Figure 1).
- Leave some open space in the design. An open layout is less tiring to the eye and mind.

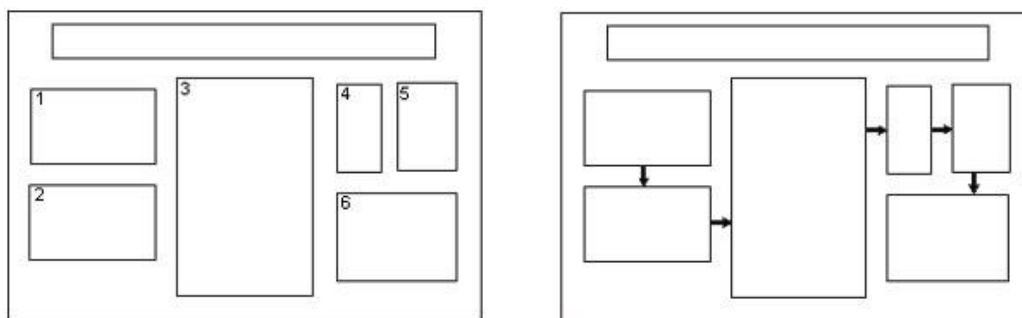


Figure 1: Conventional layouts for a poster. Long panel at top-center is title/author banner. Individual panels can be connected by numbers and arrows. Also, note the use of space between panels to achieve visual appeal.

Lettering

- Word-process all text (including captions). Print on plain white paper with a laser or inkjet printer.
- Text should be readable from five feet away. Use a *minimum* font size of 18 points.
- Lettering for the title should be large (at least 70-point font). Use all capital letters for the title.

Visuals

- Present numerical data in the form of graphs, rather than tables (graphs make trends in the data much more evident). If data must be presented in table-form, KEEP IT SIMPLE.
- Visuals should be simple and bold. Leave out or remove any unnecessary details.
- Make sure that any visual can "stand alone" (i. e., graph axes are properly labeled, maps have north arrows and distance scales, symbols are explained, etc.).
- Use color to enhance comprehension, not to decorate the poster. Neatly coloring black-line illustrations with color pencils is entirely acceptable.
- Make sure that the text and the visuals are integrated. Figures should be numbered consecutively according to the order in which they are first mentioned in the text.
- Each visual should have a *brief* title (for example: Figure 1- Location of study area).

Text

- Keep the text brief. Blocks of text should not exceed three paragraphs (viewers won't bother to read more than that). Use text to (a) introduce the study (what hypothesis was tested or what problem was investigated? why was the study worth doing?), (b) explain visuals and direct viewer's attention to significant data trends and relationships portrayed in the visuals, and (c) state and explain the interpretations that follow from the data. In many cases, conclusions can be summarized in a bullet-point list.
- Depending upon the stage or nature of your project, the text could also include sections on future research plans or questions for discussion with viewers.
- Cite and reference any sources of information other than your own, just as you would do with a research paper. Ask your professor about the particular citation system that you should use (every discipline uses slightly different styles). The "References Cited" is placed at the end of the poster.

Miscellaneous Suggestions

- SIMPLICITY IS THE KEY. Keep to the point, and don't try to cover too many things. Present only enough data to support your conclusions. On the other hand, make sure that you present sufficient data to support your conclusions.
- When you begin to make your poster, first create a list of the visuals that you would use if you were describing your project with *only the visuals*. Write the text *after* you have created the list of visuals.
- Before the poster session, rehearse a brief summary of your project. Many viewers will be in a hurry and will want a quick "guided tour" of your poster. Don't be afraid to point out uncertainties in your work; this is where you may get useful feedback.



Title

Authors

St. John Hospital & Medical Center, Detroit, Michigan

Introduction (or Background)

Results

Discussion / Conclusion

Materials and Methods

Figures, tables, and/or graphs

References

Retroperitoneal Hematoma in Patients Undergoing Cardiac Catheterization



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Research Study Example

Introduction

More than a million cardiac catheterizations are performed in the United States every year. Complications from femoral artery puncture have increased with increasing complexity of diagnostic and therapeutic cardiac catheterizations and the more frequent use of:

- Thrombolytics,
- Antiplatelet agents,
- Anticoagulants and
- Larger size cannulas

Retroperitoneal Hematoma (RPH) remains the least well studied and the most serious of the vascular complications of cardiac catheterization. RPH is a cause of significant morbidity and is potentially lethal. Early diagnosis of RPH is elusive due to its concealed nature.

Research Objective

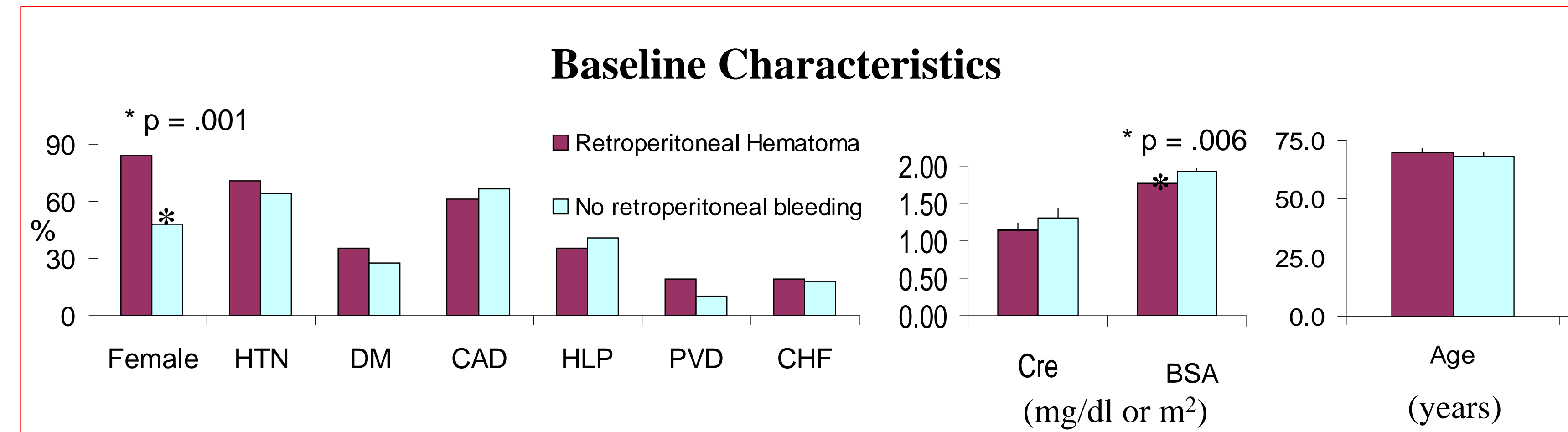
To retrospectively study the demographic, clinical and hospital outcome data on patients who developed retroperitoneal hemorrhage after cardiac catheterization in our institution over the last five years.

Methods

- About 5000 cases of cardiac catheterizations are performed at SJHMC every year (54.8 % male / 45.2 % female)
- Billing codes for “hemorrhage complicating procedure”, “hematoma complicating procedure” and “anemia requiring transfusion” were used to identify cases
- 1648 patients who underwent percutaneous procedures between 01/01/2000 to 07/30/2005 were identified.
- 1634 charts were reviewed
- We collected:

baseline demographics	clinical manifestations
procedural details	management
anticoagulation	clinical outcome
- Control group (n = 90) randomly selected and matched with RPH cases
- 31 positive cases of RPH were identified, 26 females (83.9%), 5 males (16.1%)

Results

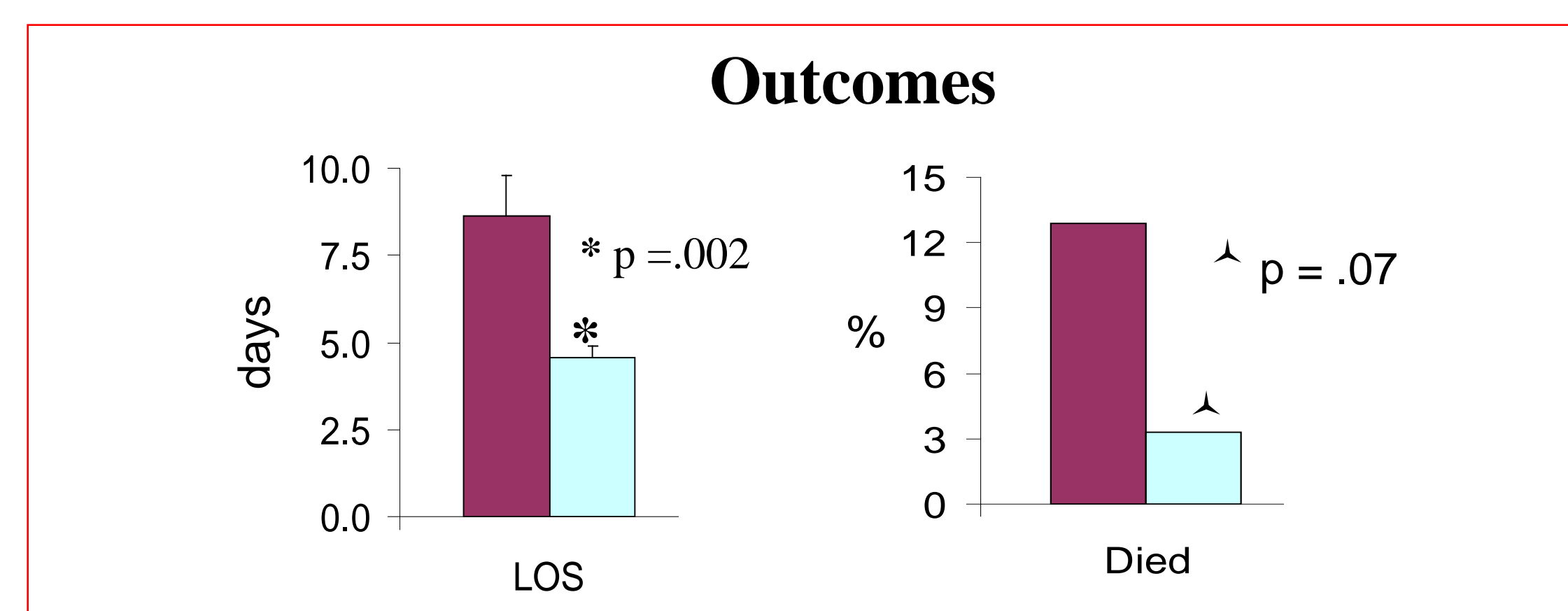
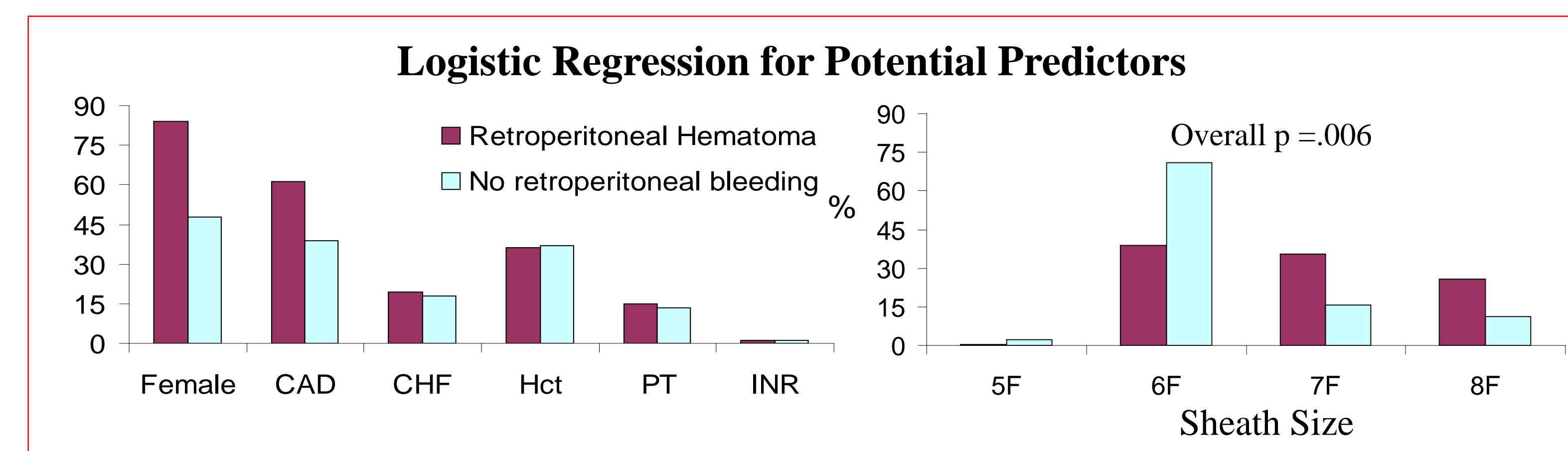
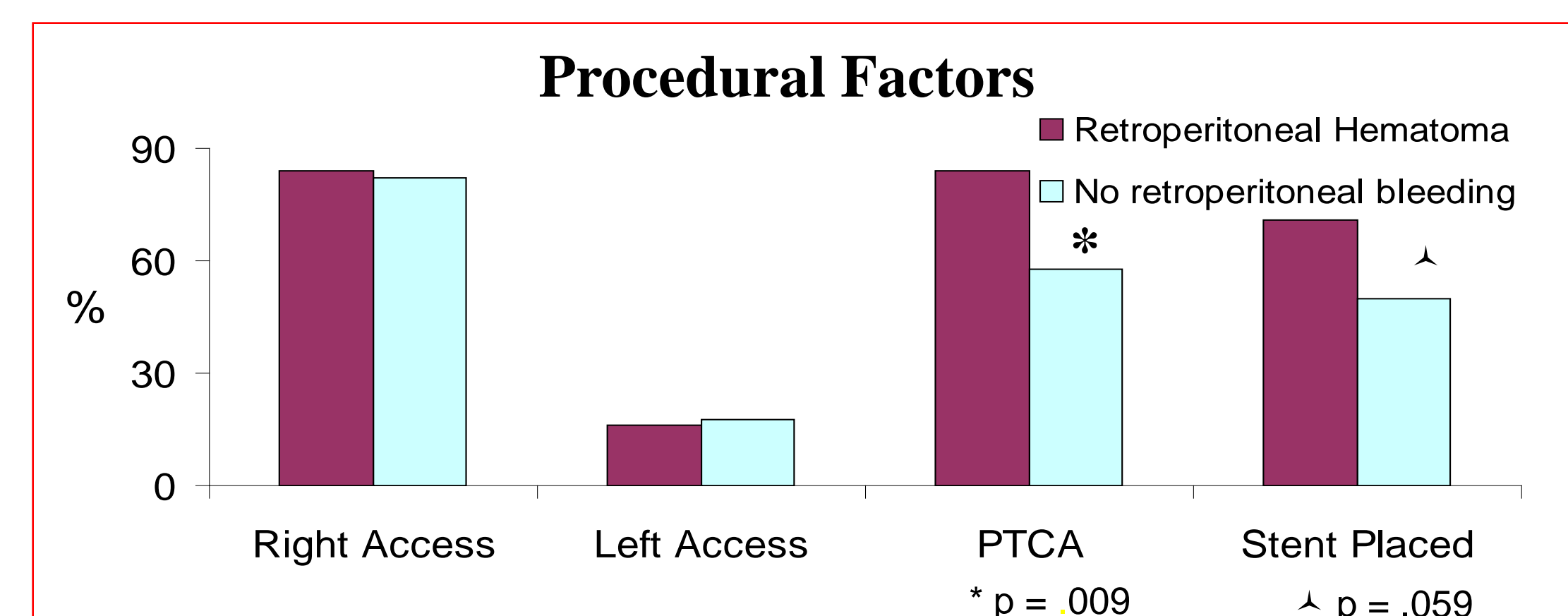


Medication Use

Medication	Count	Percentage
Heparin	28*	90.3%
ASA	25	80.6%
Integrilin	24	77.4%
Plavix	22	71.0%
Coumadin	3	9.7%
Angiomax	2	6.5%
ReoPro	1	3.2%
Celebrex	2	6.5%
Aggrastat	0	0%
LMWH	0	0%

Clinical Features

Feature	Count	Percentage
Fall in Hb/Hct	30*	96.8%
Hypotension	27	87.1%
Abdominal Pain	18	58.1%
Nausea / Vomiting	12	38.7%
Flank Ecchymosis	4	12.9%
Bradycardia	3	9.7%
Urinary Symptoms	3	9.7%
Lower Ext Pain	2	6.5%
Chest Pain	2	6.5%
Femoral N Palsy	0	0%
Other Symptoms	10	32.3%
Groin Hematoma	16	51.6%
Pseudo Aneurysm	3	9.7%



Discussion

- Our 31 cases makes this the second largest series of RPH cases ever reported
- 86% female (26/31)
- RPH incidence in our institution was 0.11
- Our study reaffirms that female gender independently predicts RPH
 - May be due to smaller and shorter femoral arteries (*J Am Coll Cardiol 2001; 73: 561*)
 - Hormonal causes may also play a part (*Thromb Haemost 1995; 73: 561*)
- Hypotension (87.1%), fall in Hb / Hct (96.8%), abdominal pain (58.1%), nausea and vomiting (38.7%) were the predominant presenting clinical features
- Sheath size, BSA , PTCA and stents were risk factors in univariate analyses
- 12.9% (4/31) of patients were treated surgically and 87.1% (27/31) conservatively
- RPH associated with longer length of hospital stay (8.6 vs 4.5 days; p = .002)
- Mortality rate was 12.9% in patients with RPH (4/31), compared to 3.3% in control group (3/90), (P=0.07).
- Increased awareness of risk factors and presenting clinical features will promote prevention, early recognition and prompt treatment.

References

1. Trerotola SO, Kuhlman JE, Fishman EK. Bleeding complications of femoral catheterization: CT evaluation. *Radiology*. 1990 Jan;174(1):37-40.
2. Sreeram S, Lumsden AB, Miller JS, Salam AA, Dodson TF, Smith RB. Retroperitoneal hematoma following femoral arterial catheterization: a serious and often fatal complication. *Am Surg*. 1993 Feb;59(2):94-8.
3. Kent KC, Moscucci M, Mansour KA, DiMattia S, Gallagher S, Kuntz R, Skillman JJ. Retroperitoneal hematoma after cardiac catheterization: prevalence, risk factors, and optimal management. *J Vasc Surg*. 1994 Dec;20(6):905-10; discussion 910-3.