

# Life of the Porty: Examining Longevity and Outcomes of an Implanted Port

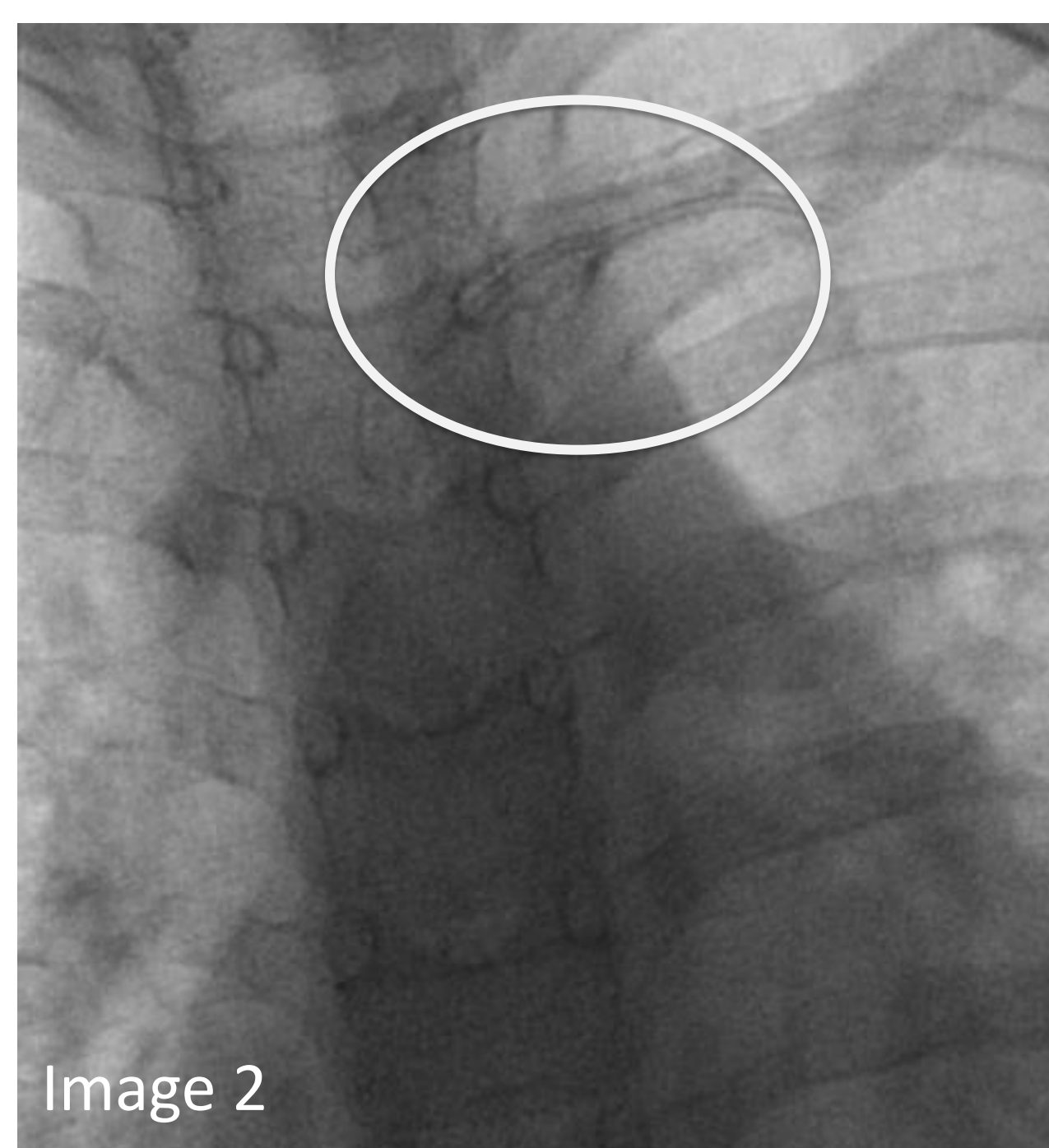
Joseph Miller, MD, Mehvish Abbasi MSN, CPNP, Hanna Chong, MSN, CPNP, Shimwoo Lee, MD, Megan Mamaril, MSN, CPNP, Amanda Mendelis, MSN, CPNP, Hana Pak, MSN, CPNP, Ginny Than, MSN, CPNP

## INTRODUCTION

An implanted port provides central venous access for patients requiring long-term intermittent infusion therapies <sup>6</sup>.

Upon end of therapy or emergence of unresolvable malfunction or infection, ports are removed under general anesthesia by a qualified proceduralist.

Older ports are associated with more complications <sup>2,8,9</sup>, increased likelihood of a complex removal procedure <sup>4,7</sup>, increased tendency to require venoplasty<sup>5</sup> (image 1), and higher incidence of catheter fracture/retention <sup>1,3,5</sup> (image 2).



## BACKGROUND

Port dwell time recommendations vary within the current evidence. 15 cases of port removals were examined with attention given to length of implantation, procedural time, anesthesia time, pre-procedural complications, and intraoperative complexity and outcome.

## OBJECTIVES

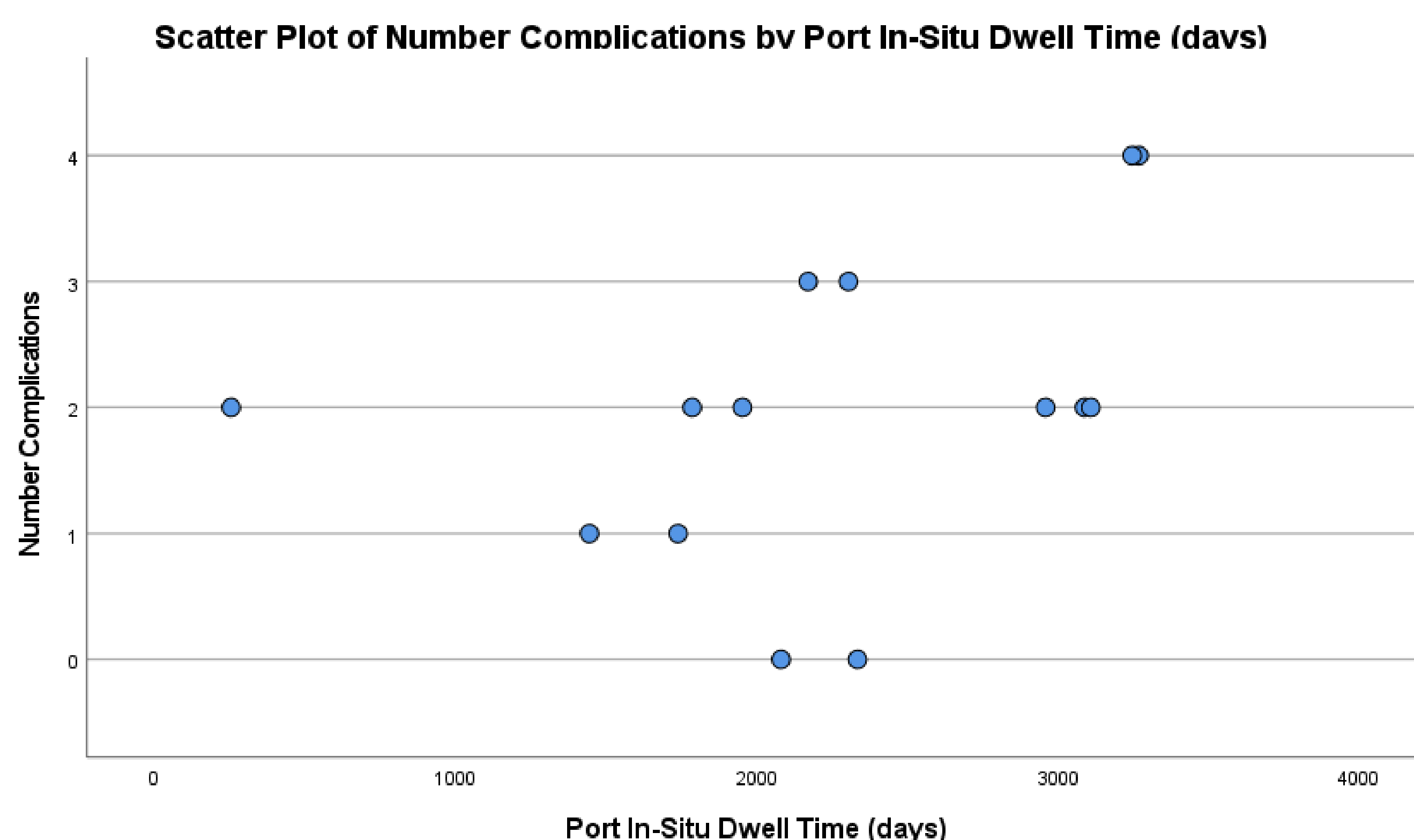
To identify correlations between port in situ dwell time, catheter complications, and intraoperative interventions during removal.

To consider diagnostic and preventative measures to avoid intraoperative procedural complications of port removals.

## RESULTS

### Complications Overview

Mechanical issue	53% (8)
Infection	6% (1)
Occlusion	87% (13)
Pain	20% (3)
Removal complication	20% (3)



## CONCLUSIONS

**Nursing Role:** Communication between patients/caregivers and nursing regarding persistent occlusions, pain, swelling or leaking during infusions, difficulty with needle access procedure, and any other signs of port malfunction is essential.

Radiographic studies (CT Angiogram, US Doppler) can provide information regarding catheter integrity, location, and affected vasculature for removal vs replacement planning. Consulting Interventional Radiology for complex port procedures is recommended.

Additional studies are required to establish guidelines port in situ dwell time.

The presence of complications in the setting of dwell time greater than three years may warrant further evaluation for replacement.

