

# **AN EVALUATION OF THE HEALTH IMPACT OF INJECTING DRUG USE ON ACUTE SECONDARY CARE SERVICES: THE EAST OF SCOTLAND EXPERIENCE**

MacLeod CS,<sup>1</sup> O'Neill HL,<sup>1</sup> Flett MM,<sup>1</sup> Guthrie GJK,<sup>1</sup> Radley A,<sup>2</sup> Nagy J,<sup>1</sup> Suttie SA<sup>1</sup>

<sup>1</sup>East of Scotland Vascular Network, Department of Vascular Surgery, Ninewells Hospital, Dundee, Scotland, UK

<sup>2</sup>Department of Public Health, Ninewells Hospital, Dundee, Scotland, UK

## **Background**

Scotland is “Drug deaths capital of Europe”, and potentially the world, constituting a public health emergency. Belying this mortality is morbidity. People who inject drugs (PWID) are at risk of a plethora of injecting-related morbidities, including skin and soft tissue infections, with potential complex collections, perivascular soft tissue sepsis and vascular injuries such as infected pseudoaneurysms. This study aimed to characterise hospital admissions for limb-related complications secondary to injecting drug use to enable better comprehension of the patterns and presentations of injecting injuries, and overall help to define, target and deliver effective harm reduction strategies.

## **Methods**

Retrospective data collection between December 2011-December 2020. Patients were identified through discharge codes and a prospective operative unit database. Demographic and admission details were extracted from electronic records and a database created. Two diagnoses could be recorded for each admission, reflecting the realities of clinical practice. Descriptive statistical analyses were performed.

## **Results**

There were 805 admissions for 445 patients (1-10 admissions/patient): mean age 37.5 (21.2-61.5) years and 488 (60.6%; 277 patients, 61.9%) were male. Admissions were generated by: 333 groin abscesses; 75 other abscesses; 109 pseudoaneurysms; 126 necrotising soft tissue infections (NSTI); 137 cellulitis cases; 168 deep venous thromboses (DVT); 59 infected DVTs and 138 other pathologies. Overall 570 (70.8%) admissions were cared for by surgical specialities, with most, 412, under vascular surgery. Surgery was required for 409 admissions (50.8%), with 534 operations performed (1-7/admission). There were 31 lower limb amputations. During follow-up 97 (21.8%) patients died, mean age 43.6 (26.8-62.8).

## **Conclusion**

There is a high burden of limb-related morbidity secondary to injecting drug use requiring acute secondary care services. These limb-related complications can threaten both life and limb, often reflecting complex, high-tariff pathology with substantial emergency healthcare needs. These patients are high risk for further morbidity and early mortality and should be targeted for harm reduction.

**Disclosure of Interest Statement:** None.

## **SUMMARY OF PRESENTER/FIRST AUTHOR (CAITLIN S MACLEOD)**

I am a Vascular Surgery Registrar in Dundee undertaking a MD focused on the health impact of injecting drug use locally. Unfortunately, in Vascular we commonly manage severe, life- and limb-threatening complications of injecting drug use. This work aims to highlight these health sequelae and develop targeted harm reduction strategies.