

# A simple intervention improves monitoring for early detection of Lupus Nephritis in patients with SLE

21A164



M.Ahmed, A. Connerton, L.Durcan, D.Howard, P.O'Connell, M. Azeez  
Rheumatology Department , Beaumont Hospital, Dublin, Ireland



## Introduction

Systemic lupus erythematosus (SLE) is a complex autoimmune disease which affects roughly 1,500 patients in Ireland. It is up to 10 times more common in females. Lupus nephritis (LN) is one of the leading causes of mortality. LN is a common manifestation in SLE affecting up to 40% of patients. Research has shown several predictors of LN which if monitored regularly, can allow for earlier detection of renal disease.

## Aim

To assess compliance with EULAR criteria in relation to monitoring for lupus nephritis in our SLE clinic.

## Standard

We compared our practice with 2012 ACR guidelines and 2019 EULAR recommendations for management of LN. Both standards recommend monitoring for renal disease by checking blood pressure, proteinuria, complements and anti dsDNA.

## Methodology

We completed an initial retrospective audit in March 2020 with a sample size of 50 patients. Data were collected from patient charts and the digital laboratory system. We checked if patients had blood pressure, urine dipstick, complement levels and dsDNA checked at each outpatient review. The results from the initial audit led to the implementation of a new checklist proforma in the form of a sticker to be placed on patients notes at each clinic visit (figure 1). We re-audited one year after introducing the intervention and our results are shown in figure 2.

<b>BP</b>
<b>Urine dipstick</b>
<b>U PCR</b>
<b>AntidsDNA</b>
<b>C3</b>
<b>C4</b>
<b>ESR</b>
<b>CRP</b>

Figure (1)

<b>BP</b> Done Not Done	63(90%) 7(10%)
<b>Urine dipstick</b> Done Not Done	57(81%) 13(19%)
<b>U PCR</b> Done Not Done	19(27%) 51(73%)
<b>Anti dsDNA</b> Done Not Done	36(51%) 34(49%)
<b>C3</b> Done Not Done	43(61%) 27(39%)
<b>C4</b> Done Not Done	43(61%) 27(39%)
<b>ESR</b> Done Not Done	31(44%) 39(56%)
<b>CRP</b> Done Not Done	45(64%) 25(36%)

Table (1)

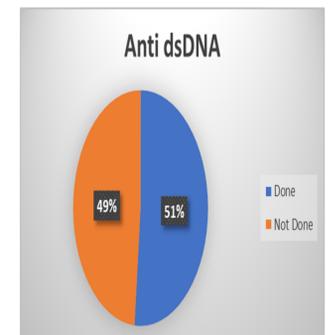
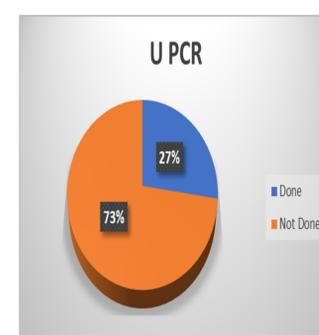
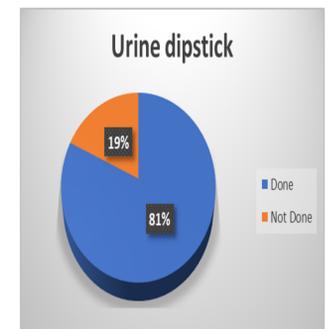
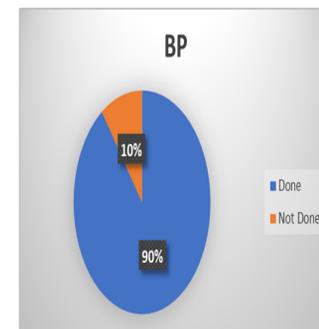


Figure (2)

## Results

In the initial audit, 46% of our cohort did not have blood pressure checked and 40% had no urine dipstick performed. After implementation of the checklist sticker 90% had blood pressure checked and urine dipstick was performed in 80%. More than half of the patients had serology checked, while only 27% had urine protein-to-creatinine ratio (UPCR) examined (table 1, figure 2).

## Conclusion

This simple audit has led to the introduction of regular education sessions with departmental staff and the implementation of a simple LN checklist in the medical notes. The results show an improvement in documentation and compliance with international standards. Nonetheless over 70% of patients still did not have UPCR checked. Further educational interventions are ongoing with re-audit in due course.