Beth Israel Deaconess Medical Center



Multidisciplinary approach to increasing vaccination rates of

patients starting immunosuppressive therapies
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Introduction

Patients on immunosuppressive medications are at a higher risk for infection. Dermatology prescribes immunosuppressive frequently medications and found a need to ensure patients are appropriately screened and have up-to-date vaccinations.

Objective

Increase the vaccination rates and appropriate infectious disease screening of patients starting immunosuppressive medication through the Pre-Immunosuppressive Clinic.

Methods

- Through a multidisciplinary approach, a Pre-Immunosuppression Clinic was created. The clinic is through infectious disease (ID) and is specifically dedicated to patients starting immunosuppressive medications. We created consensus immunization and screening guidelines prior to starting immunosuppression.
- We educated dermatology and infectious disease physicians, pharmacy staff, and administration on the workflow process (Figure 1).
- A retrospective chart review was conducted from June –September 2021 for dermatologic patients starting immunosuppressive medications. We reviewed referrals, successful follow-ups in the Pre-Immunosuppression Clinic, and vaccines/labs ordered by ID.

This chart review was approved by our internal Committee for Clinical Investigations (CCI)/IRB



Dermatology orders screening labs. Prior authorization process begins (if needed)

Dermatology pharmacist informs patient about Pre-Immunosuppression Clinic.

Dermatology places referral

Infectious disease (ID) administration schedules appointment

ID pharmacist updates vaccination history

Immunosuppression Clinic appointment screening labs with ID

ID orders vaccines or as needed

ID Note forwarded to referring dermatologist

Figure 1. The referral process workflow for patient evaluation at the Pre-Immunosuppression Clinic

Results

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Patients starting immunosuppression	64
Patients referred to ID	32 (50%)
Patients went to Pre- Immunosuppression Clinic	20 (63%)
Patients that received vaccinations	20(100%)
Average age of patients who went to ID	44.2
Average number of days that ID visit occurred after referral placed	12.75

medications	n
Adalimumab	26
Risankizumab	12
Methotrexate	7
Ustekinumab	6
Mycophenolate	6
Secukinumab	5
Cyclosporine	1
Upadacitinib	1

Vaccines received/planned	n
received, planned	
PCV13/PPSV23	17
Shingrix	9
Hepatitis B	5
Hepatitis A	5
Tdap	4
HPV	2
MMR	1
COVID-19 booster	1
Influenza	1

Results

- Of the patients referred to the Pre-Immunosuppression Clinic, 63% went to the clinic.
- 100% of the patients seen in the clinic were due for at least one vaccination per our consensus guidelines. All patients seen in the clinic received at least one vaccine dose.
- Several patients received additional screening labs after going to the Pre-Immunosuppression Clinic depending on individual risk factors. Common labs ordered included HIV antibodies, Hepatitis A antibodies, Hepatitis B viral loads, purified protein derivative (PPD)/ repeat Interferon gamma release assay (IGRAs).
- Several patients had already started their immunosuppressive medication before seeing ID.

Discussion

- The Pre-Immunosuppression Clinic has the potential to increase vaccination rates.
- There were additional recommendations and screening/monitoring labs ordered for patients based on risk factors or results from initial screening labs ordered by referring dermatologist
- Patients were seen in the Pre-Immunosuppression Clinic soon after the referral was placed. Referral process and attending the clinic did not delay the initiation of immunosuppressive treatment.
- Future directions include informing and involving/ other specialties