Objectives

- Primary Outcomes:
  - Capture response rate to Hepatitis B vaccination in HD patients following vaccination series 1, 2, and booster.
  - Examine factors associated with responders vs non-responders to hepatitis vaccine after series 1, 2 or booster.

- Secondary Outcomes:
  - Examine factors associated with responders vs non-responders to hepatitis vaccine after series 1, 2 or booster.
  - Determine adherence to vaccine protocol:
    - Vaccine # 2: given 4-6 weeks post vaccine # 1
    - Vaccine # 3: given 4.5-5.5 months post vaccine # 2
    - Anti-HBs level: 1-2 months post vaccine # 3 or booster.

Methods

- Retrospective chart review (PROMIS database).
- Inclusion: All HD patients receiving hepatitis vaccination since implementation of the new Hepatitis B provincial protocol.
- Exclusion: Patients with hepatitis B positive.
- Anti-HBs ≥ 10 mIU/mL.
- Known non-responders prior to study or vaccine refusal.

Results

- Vaccine response rates for HD patients similar to literature:
  - Series 1: 61.4%; Series 2: 58.3%.
  - Factors affecting vaccination response:
    - Adherence
    - Dialysis site
    - Lower response with less adherent site.

Discussion

- Vaccine response rates for HD patients similar to literature:
  - Series 1: 61.4%; Series 2: 58.3%.
  - Factors affecting vaccination response:
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Limitations

- Small numbers, limited numbers within subgroups.
- Retrospective design.
- Possibility of missed documentation.
- Unable to assess circumstances of missed late doses (eg. acute hospitalization).

Conclusions

- Adherence to regimen associated with better response to vaccine.
- Recommendations to increase adherence:
  - Increase evaluation of hepatitis vaccine records (quarterly).
  - Annual nursing in-service training.
  - Improve documentation.

Background

- Hepatitis B vaccination program at two tertiary hemodialysis centers.

Methods

- Data collection from Hemodialysis (HD) patients.
- Potential exposure due to improper disinfection of fomites.
- Chair, blood splashes on clothes, dialysis machine.
- Frequent diagnostic and therapeutic procedures.
- Immune dysfunction.
- Reduced vaccination response rate (55-88%) vs general population (95-100%).
- Hepatitis vaccine recommendations for HD patients (Table 1):
  - Higher dose vaccine plus repeat second series or booster if Hepatitis B surface antibody (Anti-HBs) < 10 mIU/mL.

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Methods

- Retrospective chart review (PROMIS database).
- Inclusion: All HD patients receiving hepatitis vaccination since implementation of the new Hepatitis B provincial protocol: St. Paul’s Hospital: Dec 2015-July 2017
- Vancouver General Hospital: Mar 2016-July 2017
- Exclusion: Patients with hepatitis B positive.
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