Look for Zebras: Identification of Immunotherapy Patients in the Emergency Department

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BACKGROUND

• When you hear hoofbeats think of horses, not zebras (Woodward, 1940).
• Increasing use of immunotherapy/checkpoint inhibitors (CI) as a single treatment or combined with chemotherapy.
• Immunotherapy adverse events (IrAEs) have unique presentations:
  • often overlooked or misdiagnosed.
  • auto-immune like reaction (Davies, 2016; Mistry et al., 2017).
• Treatment for IrAEs requires high dose steroids (Davies, 2016; Mistry et al., 2017).
• It is essential for emergency department staff to have knowledge of & promptly identify patients with IrAEs (Davies, 2016).

METHODS

• Design:
  • IRB approved descriptive, correlational study
  • Patient outcomes from retrospective EHR review
• Sample: ED RNs and physicians
• Setting: SJO Emergency Care Center
• Procedure:
  • Knowledge pretest/posttest with tailored, micro-education delivered in small groups
  • Retrospective EHR review to determine timeliness & appropriateness of treatment

RESULTS

• All ECC RN results demonstrated significant increases between pretest/posttest scores.
• Number of IrAEs identified by RNs:
  • pretest = 0.52
  • posttest = 3.77
• Physician education demonstrated increased knowledge post-education; two items reached statistical significance.
• Retrospective EHR review:
  • unique identifier for immunotherapy missing from EHR
  • small numbers of ED patients with incomplete data

IMPLICATIONS FOR PRACTICE

• Microteaching effective for providing targeted education.
• Essential to have updates to electronic health records to track patient outcomes.
• Immunotherapy charting in ED augmented through paper & pencil form.
• Immunotherapy drug information posted at triage.

CONCLUSIONS

• Non-oncology providers will increasingly encounter patients on immunotherapy.
• Microteaching effective in increasing knowledge of IrAEs and their treatment.
• EHR provides opportunities & challenges for retrieving outcome data for research, EBP, & QI projects.

PURPOSE

The purpose of this project is to determine the effectiveness of microteaching on identification and treatment of IrAEs.
• Sub aims were to:
  • measure immediate knowledge changes related to identification and management of IrAEs.
  • determine whether patient outcomes related to IrAEs were handled appropriately following education.

REFERENCES

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<th>RNs</th>
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<th>Post</th>
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<td>Yes</td>
<td>N=73</td>
<td>49.3% (36)</td>
<td>50.7% (37)</td>
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<tr>
<td>No</td>
<td>N=73</td>
<td>50.7% (37)</td>
<td>49.3% (36)</td>
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Note. Phi coefficients used to determine differences.