2017

YouTube Atherectomy Videos: What Industry is Telling Us About this Endovascular Procedure

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YouTube Atherectomy Videos
What Industry is Telling Us About this Endovascular Procedure

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OBJECTIVES
- Patients are more frequently turning to online content, particularly YouTube, for information about their providers, diseases, and interventions.
- Endovascular atherectomy is a common procedure undertaken in the treatment of peripheral vascular disease especially in outpatient treatment centers despite its cost.
- Little is known how this procedure is portrayed on online video content. We set forth to search YouTube to gain insight on how industry and non-industry portrays this endovascular technology.

METHODS
- YouTube (www.youtube.com) was accessed in July 2017 at various time points.
- A keyword search was conducted for “Atherectomy.”
- All results were separated into two categories: Industry (I) and Non-Industry (NI).
- The duration of video, age of video, total video views, academic information, cost information and whether the video mentioned location of its application or not were also collected.
- Categorical variables were compared using Fisher’s exact test and continuous variables were compared using Student’s t-test.

RESULTS I
- 3530 total search results were returned – the top 100 videos with greater than 100 views were examined.
- 44 YouTube Channels.

<table>
<thead>
<tr>
<th>Youtube Channel Breakdown</th>
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<tr>
<td>Industry (59%)</td>
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</table>

- Videos were separated into two groups: I and NI

<table>
<thead>
<tr>
<th></th>
<th>I (n=20)</th>
<th>NI (n=80)</th>
<th>p value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Duration (mins ± SD)</td>
<td>4.8 ± 4.5</td>
<td>5.6 ± 4.4</td>
<td>0.47*</td>
</tr>
<tr>
<td>Creation Time (yrs. ± SD)</td>
<td>3.3 ± 2.2</td>
<td>3.4 ± 1.9</td>
<td>0.83*</td>
</tr>
<tr>
<td>Views (±SD)</td>
<td>7386 ± 14,593</td>
<td>5560 ± 13,181</td>
<td>0.93*</td>
</tr>
<tr>
<td>Educational Content</td>
<td>70%</td>
<td>70%</td>
<td>1.0*</td>
</tr>
</tbody>
</table>

RESULTS II
- Similar between Industry and Non-Industry: duration, time since creation time, total views and educational content.
- Only 7% (n=7) of the videos reference the procedure being linked to care in outpatient treatment center.
- Only 3% (n=3) mentioned the cost of the procedure.
- These videos (n=10) from each of these categories were from non-industry sources.
- No videos mentioned the growth of this procedure.

DISCUSSION
- These data are the first to understand what patients are seeing online in terms of video content that relates to an endovascular procedure “atherectomy”
- Despite the growth of atherectomy procedures, focus of them in outpatient centers and their cost information are very limited on online video content.
- The potential impact on patient’s perception of this procedure is not known.

CONCLUSIONS
- These data should inform the vascular surgery community the lack YouTube videos that address the cost and/or location of application of this endovascular technology.
- Future work will examine patient’s impressions of videos when reviewed in the clinical setting with a vascular surgeon reviewer.