The Influence of Psychiatric Health on Breast Abscesses in the Non-Lactating Patient: A Community Hospital’s Experience

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Background

- Puerperal mastitis and abscesses are well described in the literature; however, there is little data exploring the causes of nonpuerperal abscesses.
- Diabetes mellitus, smoking and obesity have been suggested as potential risk factors since they predispose patients to all soft tissue infections.
- This study examines the characteristics of patients who presented to our community hospital with breast abscesses and aims to identify possible risk factors in the development of nonpuerperal breast abscesses.

Methods

- After institutional review board approval, we retrospectively reviewed our database of all patients who presented to our institution with a diagnosis of breast abscess from June 1, 2009 to May 30, 2016.
- Six hundred and forty-five patient encounters were initially identified.
- Encounters were excluded if the record was unable to be located within the electronic medical record (EMR), if it was an abscess recurrence, or if it was not a true diagnosis of breast abscess.
- The basic demographics, comorbidities, procedures performed, laboratory and microbiology data, as well as length of stay and recurrences for each patient were noted.
- Statistical analysis was performed using SPSS version 22.0.
- Chi-squared analyses were used to examine associations between demographics and comorbidities of patients with breast abscesses.

Results

- We identified 188 unique patients with a true diagnosis of primary breast abscess. Of these patients, the majority were non-lactating, non-diabetic, obese, African American women, who were smokers. (Table 1)
- We had a large percentage of patients with co-existing psychiatric diagnoses. (Figure 2)
- The likelihood of drainage being performed in the operating room for patients with a psychiatric disorder (17 of 52 [33%]) was greater than that for the general population (19 of 136 [13%]). (P=.004). (Figure 1)
- The likelihood of having a recurrence of their primary breast abscess for patients with a psychiatric disorder (20 of 52 [38%]) was greater than that for the general population (22 of 136 [16%]). (P>.001). (Figure 3)

Conclusions

- Our study suggests that psychiatric co-morbidities and/or psychotropic medications may be potential risk factors for the development of nonpuerperal abscesses. This has not previously been reported.
- The majority of patients in our study with nonpuerperal breast abscesses were non-diabetics, which contradicts current literature.
- Limitations of our study include incomplete psychiatric histories, lack of patient follow-up, and a small patient population size. In addition, our population’s demographics were not representative of the general population’s.
- Further studies must be done to explore this relationship amongst psychiatric diagnoses, psychiatric pharmaceuticals and the development and/or recurrence of non-puerperal abscesses.
- A future aim will be to explore the use of a patient navigator in the management of our patients, particularly in the establishment of care for treatment of our patients’ psychiatric co-morbidities.

References


Table 1: Demographics

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<thead>
<tr>
<th>Psychiatric Diagnosis</th>
<th>Number of Patients</th>
<th>(Percentage)</th>
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</thead>
<tbody>
<tr>
<td>ADHD</td>
<td>52 (28%)</td>
<td></td>
</tr>
<tr>
<td>Substance Abuse</td>
<td>40 (21%)</td>
<td></td>
</tr>
<tr>
<td>PTSD</td>
<td>36 (19%)</td>
<td></td>
</tr>
<tr>
<td>Schizophrenia</td>
<td>24 (13%)</td>
<td></td>
</tr>
<tr>
<td>Anxiety</td>
<td>12 (6%)</td>
<td></td>
</tr>
<tr>
<td>Depression</td>
<td>8 (4%)</td>
<td></td>
</tr>
<tr>
<td>PTSD</td>
<td>6 (3%)</td>
<td></td>
</tr>
<tr>
<td>Social phobia</td>
<td>4 (2%)</td>
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</tr>
</tbody>
</table>

Figure 1: Breakdown of Diagnoses Amongst Patients with a Co-existing Psychiatric Diagnosis

- Anxiety
- Depression
- Social phobia
- PTSD
- Schizophrenia
- Substance Abuse
- ADHD

Figure 2: Operating Room in Patients with a Psychiatric Diagnosis

- Drainage in the Operating Room
- No Drainage

Figure 3: Breakdown of Drainages Amongst Patients with a Co-existing Psychiatric Diagnosis

- No Drainage
- Drainage in the Operating Room

Figure 4: Recurrence Rate of Breast Abscess in Patients with a Psychiatric Diagnosis

- Yes
- No

Figure 5: Breakdown of Diagnoses Amongst Patients with a Co-existing Psychiatric Diagnosis

- Anxiety
- Depression
- Social phobia
- PTSD
- Schizophrenia
- Substance Abuse
- ADHD

Figure 6: Recurrence Rate of Breast Abscesses in Patients with a Psychiatric Disorder

- Yes
- No

Figure 7: Breakdown of Diagnoses Amongst Patients with a Co-existing Psychiatric Diagnosis

- Anxiety
- Depression
- Social phobia
- PTSD
- Schizophrenia
- Substance Abuse
- ADHD