Localized Hypertrichosis After Infectious Rash (“HAIR”) in Adults: A Report of 5 cases.

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Introduction
Localized excess hair growth or hypertrichosis has been associated with a variety of factors, including repeated skin trauma, periphery of burns and insect bites\(^1\). Review of English language literature in the past 50 years revealed only a single report of localized HAIR, an infant with recent chicken pox\(^2\). I, herein, report localized HAIR in 5 adults with a recent diagnosis of skin and soft tissue infection (SSTI).

Objectives
To characterize the clinical profile of adult patients with SSTIs who develop localized HAIR following their infections.

Materials & Methods
Localized HAIR was defined as excessive growth of hair in a circumscribed area of skin previously involved with an infection. All patients had been evaluated and treated by an infectious disease physician (FAM) at a community teaching hospital in St. Louis, Missouri, during the period 2004-2012.

Results
Five cases of localized HAIR were analyzed (Table). The 2 patients with lower extremity SSTI had pre-existing chronic lower extremity edema, one case due to prior venous saphenectomy (case C), another associated with morbid obesity (case D). Comorbidities also included diabetes in 2 (40%) patients (cases A and E). Diagnosis of localized HAIR was made 6-12 weeks following the initial SSTI. All patients had returned to baseline health at the time of the diagnosis of localized HAIR, several considering it unsightly\(^3\). Based on the benign and usually transient nature of non-infectious-related localized hypertrichosis\(^1,3\), all patients were reassured. One was noted to have complete resolution of prior HAIR when seen 3 years later.

Selected case histories
Patient B: 45 y.o. female, recently hospitalized for treatment of hypertensive urgency, requiring placement of a peripheral IV catheter in the left forearm. One day following discharge, she was readmitted with septic thrombophlebitis of the forearm. Blood and wound cultures grew methicillin-resistant Staphylococcus aureus. She underwent antibiotic treatment and surgical resection of the infected vein segment. At 2 month follow-up, the wound was completely healed but patient complained of “unsightly” hair on her forearm (Fig. 1).

Patient C: 48 y.o. male with history of coronary artery bypass graft with right lower extremity venous saphenectomy, congestive heart failure and sleep apnea, presented with acute onset of fever, chills, and severe right lower extremity cellulitis requiring several days of intravenous antibiotic therapy. At 2 month follow-up, there were no signs of infection but patient noted “unusually thick and long” hair growing on the affected leg (Fig. 2). He was seen 3 years later for an unrelated condition with complete resolution of prior HAIR (Fig. 3).

Table. Clinical profile of patients with localized HAIR

<table>
<thead>
<tr>
<th>Patient</th>
<th>Age, y</th>
<th>Gender</th>
<th>Race</th>
<th>Infection (location)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>39</td>
<td>Female</td>
<td>Black</td>
<td>Cellulitis (finger)</td>
</tr>
<tr>
<td>B</td>
<td>45</td>
<td>Female</td>
<td>White</td>
<td>VT(^*) (forearm)</td>
</tr>
<tr>
<td>C</td>
<td>48</td>
<td>Male</td>
<td>White</td>
<td>Cellulitis (leg)</td>
</tr>
<tr>
<td>D</td>
<td>42</td>
<td>Male</td>
<td>White</td>
<td>Cellulitis (leg)</td>
</tr>
<tr>
<td>E</td>
<td>71</td>
<td>Female</td>
<td>Black</td>
<td>Bursitis (elbow)</td>
</tr>
</tbody>
</table>

\(^*\)Venous thrombophlebitis
\(^\dagger\)Coronary artery bypass graft
\(^\ddagger\)Congestive heart failure

Discussion
Localized HAIR has been reported following a variety of insults to the skin, including repeated irritation, friction, periphery of burns, excoriated insect bites and intermittent pressure as reported on the shoulders of sack bearers\(^1\). It has also been associated with certain vaccines, including smallpox, BCG, and tetanus-diptheria\(^1\). Localized HAIR associated with infections unrelated to immunization have been limited to a report of osteomyelitis of the tibia in 1956, gonococcal arthritis in 1934, and a case of childhood chickenpox in 1972\(^2,3\).

To the best of my knowledge, the current work is the first report of localized HAIR due to bacterial SSTIs unrelated to vaccination or underlying bone or joint infection. Given the common occurrence of SSTIs in the general population, the incidence of localized HAIR is likely much higher than appreciated. The pathophysiology of localized HAIR remains unclear, although heat and hyperemia have been postulated to serve as stimulants for the hair follicle. Based on the published literature involving non-infectious causes of localized hypertrichosis\(^1,3\) and the experience described herein, localized HAIR is benign and usually resolves with time. Patients should be reassured accordingly without the need for further evaluation.

Conclusions
Localized HAIR is a potential delayed sequelae of SSTIs. However, aside from its potential esthetic concerns, it has no health consequences and there is no need for its further evaluation.

References

Disclosures/Disclaimers
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