<u>Chief Complaint:</u> "I got stung by a bee" x 1 day

<u>History of Present Illness:</u>

A.B. is a 28 y/o M with history of bee stings presenting with complaints of left hand swelling secondary to bee sting 18 hours ago. Pt reports that he is a beekeeper and was not wearing any protective gear when he was stung. He has been stung multiple times in the past with similar reactions and no history of anaphylaxis. Pt reports that he was stung at the base of his middle finger and the swelling has been spreading proximally from dorsal left hand to wrist. He states he has pain with palpation of his hand which he rates 5/10. He has taken tylenol and applied ice to his hand without improvement of his symptoms. He admits mild tingling sensation in his hand. Pt states TDAP is up to date. He denies fever, chills, sensation of his throat closing, difficulty breathing, chest pain, headache, dizziness, palpitations, vomit, nausea.

Past Medical History:

Present illnesses – None Past medical illnesses – None

At home Medications:

None reported

Allergies:

Bee stings

Review of Systems:

General – Denies recent changes in weight, loss of appetite, generalized fatigue, fever or chills, or night sweats.

Skin, hair, nails – Admits swelling and pain associated with left hand and wrist.

Head – Denies headaches, vertigo or head trauma.

Pulmonary system – Denies difficulty breathing, cough, wheezing.

Cardiovascular system – Denies chest pain, irregular heartbeat, edema/swelling of ankles or feet, syncope or known heart murmur.

Nervous – Denies seizures, headache, loss of consciousness, sensory disturbances, ataxia, loss of strength, change in cognition / mental status, weakness or recent onset memory loss.

Peripheral vascular system – Denies coldness or trophic changes, varicose veins, peripheral edema or color changes.

Physical

<u>General</u>: 28 year old male appears well groomed, dressed appropriately for the weather, A&O x3, looking about his stated age of 28. Pt in no acute distress. Ambulates independently.

Vital Signs:

BP: Seated: 134/84

HR: 77 BPM

R: 18 min unlabored T: 97.7F (forehead) O2 Sat: 99% Room air

Physical Exam:

Skin: Non diaphoretic. Warm and moist, with good turgor. Left hand - edema of the hand and wrist, nonerythematous. Limited range of motion. Normothermic.

Head: Normocephalic, atraumatic, non tender to palpation throughout. No swelling noted.

Oropharynx: No exudates, masses, lesions, foreign bodies. Tonsils present with no exudate.

Airway patent.

Uvula: pink, no edema.

Neck: Trachea midline. No masses, lesions, scars. FROM, no stridor, 2+ carotid pulse, no thrills, no bruits noted bilaterally, no cervical adenopathy noted.

Thyroid: Non-tender, no palpable masses, no thyromegaly, no bruits noted.

Chest: Symmetrical, no deformities, no trauma. Respirations unlabored.

Lungs: Clear to auscultation and percussion bilaterally. Chest expansion and diaphragmatic excursion symmetrical. Tactile fremitus symmetric throughout. No adventitious sounds.

Heart: No JVP preset. Normal rate, normal rhythm. S1 and S2 are distinct with no murmurs, S3 or S4. No splitting of S2 or friction rubs appreciated.

PVS: Extremities are warm and without edema. Calves are nontender with no stasis changes. Pulses are 2+ and symmetric.

MSK: No erythema, warmth or crepitus noted. Limited ROM in left hand and wrist due to swelling and discomfort.

Assessment:

28 year old M presents with swelling to the left hand and wrist secondary to bee sting 18 hours ago. Pt iced hand and took Tylenol with no relief. Pt provided 2 tablets of Benadryl and Dexamethasone 10mg IM in office. 40mg Prednisone x4 days sent to Pt's pharmacy. Pt advised to take prednisone as prescribed and continue antihistamines, NSAIDS, ICE. Pt advised to monitor for worsening symptoms and proceed to ED should alarming

symptoms occur such as chest pain, throat closing sensation, hypotension, worsening pain, numbness.

Article: Efficacy of Concentrated Heat for Treatment of Insect Bites: A Real-world Study This study evaluated the benefits of using localized heat using a medical device called "heat it". This device is intended to reduce effects such as swelling, itching, and pain caused by insect bites. The study included 1,750 participants and included bites/stings from mosquitoes, bees, and wasps among others. The study revealed that those with bee stings experienced 44% itch reduction rates while those with wasp stings experienced 64% reduction in itch rates. Pain intensity was also found to be reduced for mosquito bites, bees and wasp stings. Pain was reduced by 34% after 1 minute of heat application for bee stings and wasp stings, and by 64% after 5-10 minutes. Pain was also reduced for mosquito bites by 24% in the first minute and 80% after 5-10 minutes. The findings from this study suggest that heat application to stings and insect bites may be beneficial in reducing pain and itching.