

Warts and Molluscum Contagiosum Referral Guideline

Indications for Specialty Care Referral

- Consult must indicate site, treatments and failure of conservative therapy for 6 months.
- Periungual Warts, if large or refractory to the conservative management
- Markedly extensive warts or MC (may indicate underlying immunodeficiency or disease).
- Large or numerous warts/MC that are resistant to therapy for 6 months.
- Diagnosis is in question

Criteria for Return to Primary Care

- Warts have resolved and/or a suitable treatment plan has been established.

Diagnosis/Definition

- Warts are benign tumors of the skin and other epithelial tissues caused by a class of double-stranded DNA viruses called papillomaviruses.
- They appear as discrete keratotic papules or plaques and can be classified by their location (**plantar, genital, periungual**, etc.). They are most common in children and young adults.
- No single treatment is consistently highly effective
- Warts may resolve without treatment. Generally patients or parents desire treatment due to appearance, fear of spread, or discomfort.
- MC is a localized, self-limited viral infection of the skin caused by the DNA virus from the pox virus family
- MC are usually umbilicated discrete flesh colored papules that are generally asymptomatic but may be tender or itchy

Initial Diagnosis and Management

- The initial diagnosis is generally clinical based on physical exam. Location, duration and extent should be noted. If there are lesions near a mucous membrane, these should be examined as well. If the diagnosis is not obvious a biopsy may be indicated.
- Treatment options include:
- See [Wart Tx handout](#)
- Paring: arts respond much better to treatment after they have been pared. Using a 15 blade, gently remove the overlying hyperkeratotic material until the patient experiences pain, the soft part of the wart is exposed, pinpoint bleeding occurs.
- Acids - Salicylic acid preparations on formulary are Occlusal (17%) and Mediplast (40%); with some instructional assistance, patients can use these at home. Similar Over-The-Counter (OTC) preparations are readily available.
- Cryotherapy - Liquid Nitrogen applied as spray or cotton applicator, with frost lasting for 15-20 seconds. Goal is to treat visible wart plus a millimeter "halo". After thawing, a second treatment may be applied.
- Caustics (Podophyllin) - For **genital warts** (condyloma acuminata), in-office podophyllin may be used, with or without light cryotherapy. Avoid use in occlusive (under foreskin, ventral penis, etc.) environment. Condylox is on the formulary and patient applies gel twice a day for 3 consecutive days a week, repeating up to 4 weeks for external genital warts only.

- Immune modulator (Imiquimod 5% [Aldara] cream) - Is on the formulary and may be selected for patients who fail cryotherapy and podophyllin therapy options. Apply once at bedtime, wash off after 6-10 hours 3x/week every other day; treat for 16 weeks maximum.
- Retinoids – Tretinoin 0.05% cr has been used to remove the overlying hyperkeratotic material, exposing the underlying skin.
- Cantharidin (Cantharone) – solution placed on individual lesions with a wooden stick applicator and washed off in 4-6 hours or sooner if a blister forms. A blister forms within 24 hours, removing infected viral skin.
- Duct tape—Shown to actually work. Apply duct tape cut to the size of the wart and leave in place for 5 days. Replace it if it comes off. Remove on the 5th day and let it air out over night. Repeat for another 5 days until the wart resolves.
- Combination of any of the above measures may be utilized to increase efficacy.

MC

- In general, no treatment is required. Lesions usually persist for 6-9 months before spontaneously involuting. Rarely a pitted scar remains
- Treatments are the same as warts and include destructive procedures such as curettage, Cryotherapy, and cantharidin
- Off label uses of imiquimod applied daily for up to 12 weeks and/or tretinoin daily for up to 8 weeks.

Ongoing Management and Objectives

- Patients may be followed up at 2-4 week intervals. Again, it should be emphasized that although they are often refractory to therapy, most warts/mc eventually resolve with persistent treatment. Self-treatment between visits is important to increase the rate of success.