Provincial Hand and Wrist Soft Tissue Mass Primary Care Clinical Pathway

The vast majority of soft tissue masses in the hand and wrist are **benign** and can be diagnosed primarily by history and physical exam. Imaging may be required to confirm a diagnosis or determine the anatomic extent of involvement [13].

1. History of Present Illness
- Duration
- Changes in size or shape over time
- Pain, tenderness
- Impact on function

2. Physical Exam
- Mass characteristics (e.g., location, size, soft/firm)
- Skin changes (e.g., central pore, colour)
- Mobility (mobile versus fixed)
- Sensation distal to the mass

3. Red Flags

Abscess/infection: Fluctuant mass with or without cellulitis, systemic symptoms

If unsure or if additional support is required, consult specialty advice. See referral guideline tab for instructions

ER or hand and wrist surgeon* via RAAPID. See referral guideline tab for instructions

No red flags

If clinical findings are consistent with ganglion, **ultrasound not required**

Differentiate between simple cystic and solid mass

Simple cystic mass characteristics:
- Usually near a joint (dorsal wrist most common); with or without associated symptoms
- Slightly mobile, firm, rubbery nodule, attached to the underlying joint capsule or tendon sheath
- No skin changes

Uncertainty or Solid Mass

4. Investigations (Ultrasound)
- When uncertainty exists, ultrasound can be used to differentiate cystic and solid masses
- An ultrasound should be ordered for all solid masses

Cystic

Simple Cystic Mass (e.g., Ganglion)

Provide reassurance that 50% resolve spontaneously

Significant Symptoms**

No Significant Symptoms

Aspiration
Perform 3 aspirations prior to referral

Successful aspiration

Patient should be advised to return if they become symptomatic or the mass enlarges

Three failed aspirations **OR** aspiration deemed not appropriate by radiology (e.g., volar wrist ganglion)

Referral to hand and wrist surgeon* if nonoperative management not successful, patient has pain, or functional impairment. Order x-ray (hand and/or wrist) of affected joint for patients requiring referral. See referral guideline tab for instructions

Is there Rapid Growth?

Yes

No

Solid Mass

Suspected Malignant

Sarcoma: Rapid growth, painful, fixed, or recurring mass after a previous sarcoma excision

Urgent MRI

Malignant

Suspected Benign

High Priority referral to hand and wrist surgeon. See referral guideline tab for instructions

Suspected Benign

E.g., giant cell tumor, epidermal inclusion cyst, Schwannoma, lipoma, glomus tumor, gout tophus

Significant Symptoms**

No Significant Symptoms

- Refer to hand and wrist surgeon*
- Order MRI concurrently if not previously done and forward results when available to assist with triage
- See referral guideline tab for instructions

Patient should be advised to return if they become symptomatic or the mass enlarges

***hand and wrist surgeon** includes plastic and orthopedic surgeons, depending on zone.
****Significant Symptoms:** Severe pain, functional impairment impacting activities of daily living, spontaneous discharge of fluid, significant nail deformity, numbness/tingling.

See referral guideline tab for instructions on an optimal referral