

BCG LYMPHADENITIS

- BCG lymphadenitis refers to cases where the lymph nodes have become large enough to be easily palpable and a cause of concern for the parents
- most of the cases appear within 6 months of the BCG
- ipsilateral axillary glands are involved in > 95% of cases, though the cervical or supraclavicular glands may be enlarged in isolation or in association
- 2 forms are recognized: non-suppurative (simple) which resolves spontaneously in a few weeks, or suppurative, with fluctuation, erythema and oedema of the overlying skin.
- once suppuration has occurred, the subsequent course is one of spontaneous perforation, discharge and sinus formation. Healing eventually occurs through cicatrization and closure of the sinus, the process taking several months.

Management

- BCG lymphadenitis without suppuration (no fluctuation)
 - drugs are not required
 - reassurance and follow-up is advised.
 - several controlled trials and a recent metaanalysis (Cochrane database) have suggested that drugs such as antibiotics (e.g. erythromycin) or antituberculous drugs neither hasten resolution nor prevent its progression into suppuration.
- BCG lymphadenitis with suppuration (fluctuation)
 - needle aspiration is recommended. Usually one aspiration is effective, but repeated aspirations may be needed for some patients.
 - surgical excision is needed when needle aspiration has failed (in multiloculated and matted nodes) or when suppurative nodes have drained with sinus formation.
 - surgical incision is not recommended

Needle aspiration:

- prevents spontaneous perforation and associated complications
- safe, shortens the duration of healing

- persistent lymphadenitis
 - in patients with large and persistent or recurrent lymphadenopathy, possibility of underlying immunodeficiency should be investigated. Thus all infants presenting with BCG lymphadenitis should be followed up till resolution.

BCG Vaccination

Development of the normal BCG papule and scar

- small papule with induration should appear in most infants within 3-4 weeks
- the papule increases in size for a few weeks (up to 10mm in diameter)
- this subsides gradually, followed by a local lesion that may ulcerate 6-8 weeks later
- lesion will heal spontaneously and leave a small flat scar 3-6 months later

Correct technique to give BCG:

- needle:** short (10mm) 26-27 gauge, with a short bevel using a BCG or insulin syringe
- site:** left arm at deltoid insertion
- dose:** 0.05 mls for infants (< 1 year of age)
0.1 ml for children > 1 year.
- route:** intradermal

Note: Do not give BCG at other sites where lymphatic drainage makes subsequent lymphadenitis difficult to diagnose and dangerous (esp. on buttocks where lymphatic drains to inguinal and deep aortic nodes)