Chromoblastomycosis

* Chromomycosis
* Verrucous dermatitis

* A chronic fungal infection of the skin and subcutaneous tissues caused by pigmented fungi which produce thick walled single or multicellular clusters (sclerotic or muriform bodies) in tissue

* Characterized by the production of slow growing exophytic lesions usually on the feet and legs

* Chromoblastomycosis is caused by several fungi. the most common:
  * phialophora verrucosa
  * Fonsecaea pedrosoi
  * F compacta
  * cladophialophora carrionii

Rare causes:

* Rhinocladiella aquaspersa.

the causative fungi have been isolated from wood & soil. and the infection usually results from trauma such as a puncture from a splinter of wood. the condition usually found rural communities.

* All these fungi are named according to the dominant form of conidiation.

Phialophora verrucosa.

Microscopy: dominant form of conidiation is the production of flask-shaped phialides with a pronounced dark collarette at the apex.

* hyaline thin-walled elliptical conidia are produced at the tip of the phialide in basipetal succession.

Fonsecaea pedrosoi:

* Microscopy: dominat form of conidiation is sympodial with the conidia confined to the upper part of the cell.

* The brown single-celled conidia are produced on short denticles and may in turn produce secondary conidia in a similar manner.

* Conidia produced by a accepted budding.

Lab diagnosis:

* Irrespective of species, the pathogen can be seen in biopsy sections as deeply pigmented thick-walled muriform or sclerotic cells.

* Occasionally in superficial skin scrapings from the surface of the lesions pigmented hyphae, rather the sclerotic cells are seen.

Cultures

* Colonies of all species are dark grey - green to black and velvety or downy with a black reverse.

* Three forms of conidial production are observed in the most common agents of infection.

  * acropetal budding
  * production of phialides
  * sympodial conidiation.

Flucytosine

* Flucytosine use on its own or combined with amphotericin B may also be effective but resistance to flucytosine may develop if used.

* Surgery is rarely only indicated in very small lesions combined with chemotherapy.

Differential diagnosis:

* **Blastomycosis**

* Blastomycosis by the absence of a sharp border containing pain abscesses and also the of pulmonary lesions

* cutaneous tuberculosis
* Leishmaniasis, syphilis, yaws.