

**Case 10**

A 39 year-old Thai woman from Bangkok

**Chief complaint:** Multiple subcutaneous nodules on both thigh for 3 weeks

**Present illness:**

A 39 year-old woman with systemic lupus erythematosus presented with asymptomatic, numerous nodules on both legs for 3 weeks. She occasionally ate fresh vegetables and denied eating raw or half-cooked pork/meat.

**Past history:**

History of disseminated CMV, herpes zoster infection, *Bipolaris* spp., Legionella panniculitis

**Current medication:**

- HCQ(200) 1x1
- Prednisolone(5) 1x1

**Physical examination:**

Vital signs: normal

A middle-age Thai female

HEENT: not pale, no jaundice, no oral ulcer, no conjunctival injection

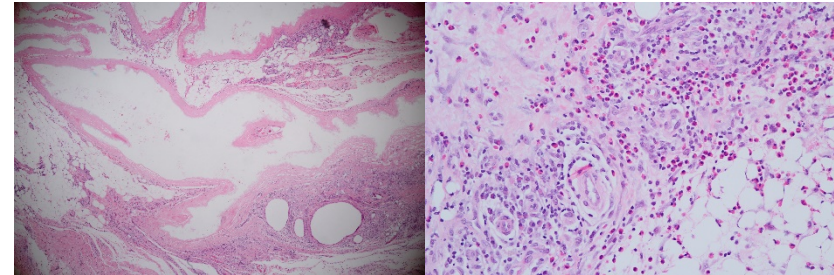
Lymph node: no palpable

Breast: no palpable breast masses

Abdomen: no hepatosplenomegaly

**Skin examination:**

- Numerous well-defined, discrete and confluent skin-colored subcutaneous nodules, soft to firm consistency, size 0.5-2 cm both thighs

**Histopathology:** (S16-13061A, S16-16688A, left leg)

- Diffuse inflammatory-cell infiltrate of numerous eosinophils, some lymphocytes and foci of foreign body granuloma in subcutaneous tissue
- Fibrosis, foreign body granuloma and large cystic space with a hint of degenerated parasite

**X-ray:** multiple oval calcification along the long axis of the muscle (Cigar-shaped)



**Diagnosis:** Cutaneous cysticercosis

**Treatment:** Albendazole 800mg/day for 21 days

**Presenter:** Woranit Onprasert, MD

**Consultant:** Somsak Tanrattanakorn, MD

**Discussion:**

Cysticercosis is caused by the larva of the cestode, *Taenia solium*, a pork tape worm. The ova of pork tapeworm are spread via the faeco–oral route<sup>1</sup>. Cysticercosis is the most common parasitic disease of the central nervous system in the world, but cysticercosis cutis has been reported much less frequently<sup>2</sup>. Ova from the adult worm in human small intestine are passed in feces and may remain viable for weeks.

Less than 1-2% of patients with cysticercosis are pork eaters and more than 95% of Indian patients are vegetarian<sup>3</sup>. This finding indicates generalized exposure to *T. solium* eggs through contaminated fruits or raw vegetables eaten as salad. Sensitivity of

stool examinations is poor and only about 15% of patients harbour a tapeworm at the time of diagnosis of cysticercosis.<sup>4</sup> The clinical onset occurs months to years after infestation and the most frequent manifestation is epilepsy<sup>5</sup>.

The most frequent sites of cysticercosis are skeletal muscle, subcutaneous tissue, CNS, and ocular structures<sup>6</sup>. Clinical manifestations of the disease depend upon the location of the cyst, cyst burden, and the host reaction.

Subcutaneous cysticercosis is usually asymptomatic, may manifest as palpable nodules as in our patient who had variable sized nodules all over the leg. It has been reported that subcutaneous cysticercosis with neurocysticercosis is more common in Asia compared to America and Africa<sup>7</sup>. The soft-tissue radiograph shows elliptic calcifications that are seen 5 years after infestation as seen in our case<sup>8</sup>. CT or MRI can also demonstrate lesions.

Management of cysticercosis includes antiparasitic drugs like albendazole and praziquantel, surgery, antiseizure prophylaxis, and symptomatic medication. A problem with antihelminthic therapy is that it causes aggregation of inflammatory cells around cysticerci, which often leads to transient clinical deterioration that is more deleterious in patients with a heavy parasitic load<sup>9</sup>. For this reason, systemic corticosteroids are given simultaneously with both albendazole and praziquantel. Rarely, this may be fatal in heavy infections, despite administration of corticosteroids<sup>10</sup>. Excision of the cyst is a treatment option for localized cutaneous cysticercosis with no associated internal organ involvement but this procedure was not possible in our case as she had hundreds of lesions all over both legs. Our patient was administered albendazole for 3 weeks to destroy the residual viable larvae and she did not develop any reaction.

**References**

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