ISSN: 2754-4974

Journal of Clinical Epidemiology & Toxicology



Review Article Open d Access

Cutaneous Sarcoidosis Case Report

Mohammed Abdul Qader Al Malmi

Consultant of Dermatology and Aesthetic Medicine in Doctor, Almalmi Clinic Sanaa Yemen and Specialist, Dermatology and Aesthetic Medicine in be you Plus Clinic Dubai UAE

ABSTRACT

Cutaneous and systemic sarcoidosis case report Sarcoidosis is an inflammatory disease that affects multiple organs in the body, but mostly the lungs and lymph glands. In people with sarcoidosis, abnormal masses or nodules (called granulomas) consisting of inflamed tissues form in certain organs of the body. These granulomas may alter the normal structure and possibly the function of the affected organ(s).

Objective: To identify systemic and cutaneous disease in human body with bone marrow proliferation.

Patients and Methods: 54 years old man patient complained of fever and night sweats. He was missed diagnosed in Cairo by oncologist as diffuse large B cell lymphoma patient since 2007 due to involvement liver and lymph nodes and he received treatment with Gemser drug and he complete remission from liver damage. At 2015 complained of night sweats; fever and loss of weight and high coup and rheumatic pain miss diagnosed as tuberculosis T B in Jordan and he received treatment for one year without improvement. I received the patient in 2018 started appeared erythematous papule nodular skin eruptions in his body I revised all his previous investigations. CBC, Bone marrow biopsy and aspiration, liver biopsy, hilar lymph node biopsy skin biopsy, immunohistochemical cytology zeal Nelson stain-vet, PCR-VE, tuberculin test -vet ACE angiotensin converting enzyme and liver function test were diagnostic plain chest or-ay, ultrasound for liver.

Results: The clinical data and investigations showed the patient had non Caseating necrosis inflammatory granuloma in his thoracic lymph nodes and liver and skin most probably systemic and cutaneous sarcoidosis.

Conclusion: Arcoidosis is unknown etiology disease and treated with methotrexate and prednisolone orally with monitoring follow up.

*Corresponding author

Mohammed Abdul Qader Al Malmi, Consultant of Dermatology and Aesthetic Medicine in Doctor, Al Malmi Clinic Sanaa Yemen and Specialist, Dermatology and Aesthetic Medicine in be you Plus Clinic Dubai, UAE.

Received: September 20, 2024; Accepted: September 28, 2024; Published: September 30, 2024

Keywords: Yemeni, Male, Patient, Sarcoidosis, Cutaneous

Case study 50 years old Yemeni man patient presented ill. He has fever night sweating, weight loss, high cough and arthralgia. Plan x ray showed hilar lymphadenopathy. Abdominal ultrasonography showed hepatosplenomegaly. Bone marrow aspiration showed active proliferation and Zelnelson staining negative. Tuberculin test is negative. Skin eruptions showed fleshy papules and nodules and plaques and annular lesions in the upper back and lower limbs. (figures 1,2,3). Skin biopsy showed hallmark noncaseating granuloma. (figure 4) The patient under treatment of methotrexate and prednisolone oral drugs. His case is stable.



Figure 1: Erythematous Fleshy Plagues, Macules, Papules in the Upper Chest

J Clin Epid Toxic, 2024 Volume 5(3): 1-4



Figure 2: Lupus Pernio Papules and Annular



Figure 3: Lupus Prenio and Plaques and Annular Lesions

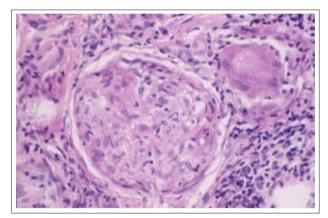


Figure 4: Histopathologic Features of Sarcoidosis Showing the Hallmark Noncaseating Granuloma

Comment

Dermatologic manifestations are seen in 25% of patients with sarcoidosis. They usually accompany systemic involvement, but in some cases they may be the only manifestations of the disease. Sarcoidosis is characterized by noncaseating epithelioid granulomas that may affect any organ system. Although Jonathan Hutchinson described the first case in 1869, the etiology of the disease is still unknown. The disease most commonly involves granuloma formation in the lungs, with 90-95% of patients having some pulmonary involvement. Other commonly involved organ systems include the lymph nodes (especially the intrathoracic nodes), the skin, the eyes, the liver, the heart, and the nervous, musculoskeletal, renal, and endocrine systems. Erythema nodosum. Erythema nodosum is a hypersensitivity reaction resulting from exposure to a variety of infectious agents (especially recent streptococcal infection), drugs (including oral contraceptives), or systemic inflammatory disorders (egg, sarcoidosis, inflammatory bowel disease) [1-15]. EN is usually an acute, self-limiting process and rarely requires treatment. Recurrences are uncommon. Tender, erythematous nodules are

usually present on the extremities, most commonly on the anterior surface of the tibia. Fever, arthralgia, and malaise may occur. EN is more common in European, especially Scandinavian, women of childbearing age than in other people. Löfgren syndrome is classically described as a triad of EN, polyarthritis, and hilar adenopathy. The adenopathy may be unilateral or bilateral hilar and/or right paratracheal lymphadenopathy. Other symptoms include anterior uveitis, fever, ankle periarthritis, arthralgias, and pulmonary involvement. Löfgren syndrome is usually an acute disease with an excellent prognosis, typically resolving spontaneously from 6-8 weeks to up to 2 years after onset [16-32]. Pulmonologists, ophthalmologists, and rheumatologists often define this syndrome differently, describing varying combinations of arthritis, arthralgia, uveitis, EN, hilar adenopathy, and/or other clinical findings. Lupus pernio, first described by Besnier in 1889, is a striking manifestation of sarcoidal skin lesions. Lupus pernio is characterized by red to purple or violaceous, indurated plaques and nodules that usually affect the nose, cheeks, ears, and lips, but it can appear on the dorsa of the hands, and on the fingers, toes, and forehead. Lupus pernio is usually more common in black women with long-standing systemic, usually pulmonary, sarcoidosis than in other people. It is also commonly seen with chronic uveitis and bone cysts. The course is usually chronic, may be more recalcitrant to treatment, and may result in severe cosmetic disfigurement. Lupus pernio, especially involving the nasal rim, has been associated with granulomatous involvement of the upper respiratory tract (50%) and lungs (75%). Additionally, it is associated with a higher frequency of ocular involvement, bone cyst formation, and lymphadenopathy or organomegaly. Macular or popular sarcoidosis is the most common lesion seen in cutaneous sarcoidosis, especially in black women. Granulomatous acne rosacea may mimic sarcoidosis clinically and histopathologic ally. Usually, lesions are asymptomatic, red-brown macules and papules commonly involving the face, the periorbital areas, the nasolabial folds, and/or the extensor surfaces. Lesions usually resolve without scarring, although scarring may occur. These lesions may also occur in acute sarcoidosis. Periocular papules and plaques. The use of dermoscopy to aid in the clinical diagnosis of macular and plaquetype sarcoidosis has been reported, with findings of "translucent yellow to orange globular-like or structureless areas associated with linear vessels" and being associated with granulomatous skin disease, including cutaneous sarcoid. Widespread atrophic lesions with elastolysis have been reported, and widespread lichenoid lesions may resemble erythroderma. Plaque sarcoidosis is characterized by round to oval, red-brown to purple, infiltrated plaques; the center of the plaque may be atrophic [33-40]. Some plaques may even appear scaly and can be confused with lesions of psoriasis or lichen planus. Dermoscopy may aid in the clinical diagnosis, as noted above. he lesions most commonly occur on the extremities, face, scalp, back, and buttocks, and they may have an annular appearance. The distribution is usually symmetrical. Angiolupoid sarcoidosis is a subtype that has a similar appearance but has large, telangiectatic vessels in addition to the characteristics mentioned above. This form of cutaneous involvement is usually chronic; most patients have the disease for more than 2 years. Lesions can heal with scarring, and, if plaques involve the scalp, they may lead to alopecia. Patients with plaque lesions usually have more severe systemic involvement. Subcutaneous nodular sarcoidosis. Subcutaneous nodular sarcoidosis is also called Darier-Roussy sarcoidosis. Lesions are usually nontender, firm, oval, flesh-colored or violaceous nodules that are 0.5-2 cm in diameter. They are commonly found on the extremities or trunk. These lesions usually appear in the beginning of the disease. Patients with these lesions often have nonsevere systemic disease. In some patients, the nodules resolve spontaneously [41-52].

J Clin Epid Toxic, 2024 Volume 5(3): 2-4

References

- 1. Caplan A, Rosenbach M, Imadojemu S (2020) Cutaneous Sarcoidosis. Semin Respir Crit Care Med 41: 689-699.
- 2. Caso F, Costa L, Rigante D, Antonio V, Rolando C, et al. (2014) Caveats and truths in genetic, clinical, autoimmune and autoinflammatory issues in Blau syndrome and early onset sarcoidosis. Autoimmun Rev 13: 1220-1229.
- Caso F, Galozzi P, Costa L, Sfriso P, Cantarini L, et al. (2015) Autoinflammatory granulomatous diseases: from Blau syndrome and early-onset sarcoidosis to NOD2-mediated disease and Crohn's disease. RMD Open 1: e000097.
- Hunt RD, Gonzalez ME, Robinson M, Meehan SA, Franks AG Jr (2012) Ulcerative sarcoidosis. Dermatol Online J 18: 29.
- Pellicano R, Tiodorovic-Zivkovic D, Gourhant JY, Catricala C, Ferrara G, et al. (2010) Dermoscopy of cutaneous sarcoidosis. Dermatology 221: 51-54.
- Fancher W, Braniecki M, Guzman G, Groth J, Krunic A (2015) Disseminated atrophic sarcoidosis with elastophagocytosis and elastic tissue loss. Br J Dermatol 172: 1154-1156.
- Nishizawa A, Igawa K, Teraki H, Yokozeki H (2014) Diffuse disseminated lichenoid-type cutaneous sarcoidosis mimicking erythroderma. Int J Dermatol 53: 369-370.
- 8. Jorizzo JL, Koufman JA, Thompson JN, White WL, Shar GG, et al. (1990) Sarcoidosis of the upper respiratory tract in patients with nasal rim lesions: a pilot study. J Am Acad Dermatol 22: 439-443.
- 9. Marcoval J, Maña J, Moreno A, Peyri J (2005) Subcutaneous sarcoidosis--clinicopathological study of 10 cases. Br J Dermatol 153: 790-794.
- Ahmed I, Harshad SR (2006) Subcutaneous sarcoidosis: is it a specific subset of cutaneous sarcoidosis frequently associated with systemic disease?. J Am Acad Dermatol 54: 55-60.
- 11. Tchernev G (2006) Cutaneous sarcoidosis: the "great imitator": etiopathogenesis, morphology, differential diagnosis, and clinical management. Am J Clin Dermatol 7: 375-382.
- Cather JC, Cohen PR (1999) Ichthyosiform sarcoidosis. J Am Acad Dermatol 40: 862-865.
- 13. Antonovich DD, Callen JP (2005) Development of sarcoidosis in cosmetic tattoos. Arch Dermatol 141: 869-872.
- Dimitriou F, Frauchiger AL, Urosevic-Maiwald M, Naegeli MC, Goldinger SM, et al. (2018) Sarcoid-like reactions in patients receiving modern melanoma treatment. Melanoma Res 28: 230-236.
- Tchernev G, Lotti T, Wollina U, Cardoso JC, Popova LV, et al. (2018) Sarcoidosis in A. C. Milan (1899)?. Open Access Maced J Med Sci 6: 99-102.
- Terziroli Beretta-Piccoli B, Mainetti C, Peeters MA, Laffitte E (2018) Cutaneous Granulomatosis: a Comprehensive Review. Clin Rev Allergy Immunol 54: 131-146.
- Sibaud V (2018) Dermatologic Reactions to Immune Checkpoint Inhibitors: Skin Toxicities and Immunotherapy. Am J Clin Dermatol 19: 345-361.
- 18. Garcia-Porrua C, Gonzalez-Gay MA, Garcia-Pais MJ, Blanco R (1998) Cutaneous vasculitis: an unusual presentation of sarcoidosis in adulthood. Scand J Rheumatol 27: 80-82.
- 19. Doherty CB, Rosen T (2008) Evidence-based therapy for cutaneous sarcoidosis. Drugs 68: 1361-1383.
- Gedalia A, Molina JF, Ellis GS Jr, Galen W, Moore C, et al. (1997) Low-dose methotrexate therapy for childhood sarcoidosis. J Pediatr 130: 25-29.
- 21. Lower EE, Baughman RP (1995) Prolonged use of methotrexate for sarcoidosis. Arch Intern Med 155: 846-851.
- Webster GF, Razsi LK, Sanchez M, Shupack JL (1991) Weekly low-dose methotrexate therapy for cutaneous sarcoidosis. J

- Am Acad Dermatol 24: 451-454.
- 23. Jones E, Callen JP (1990) Hydroxychloroquine is effective therapy for control of cutaneous sarcoidal granulomas. J Am Acad Dermatol 23: 487-489.
- 24. Baughman RP, Lower EE (1997) Steroid-sparing alternative treatments for sarcoidosis. Clin Chest Med 18: 853-864.
- Stagaki E, Mountford WK, Lackland DT, Judson MA (2009)
 The treatment of lupus pernio: results of 116 treatment courses in 54 patients. Chest 135: 468-476.
- Pariser RJ, Paul J, Hirano S, Torosky C, Smith M (2013)
 A double-blind, randomized, placebo-controlled trial of adalimumab in the treatment of cutaneous sarcoidosis. J
 Am Acad Dermatol 68: 765-773.
- Judson MA, Baughman RP, Costabel U, Drent M, Gibson KF (2014) Safety and efficacy of ustekinumab or golimumab in patients with chronic sarcoidosis. Eur Respir J 44: 1296-1307.
- 28. Heidelberger V, Ingen-Housz-Oro S, Marquet A, Mahevas M, Bessis D (2017) Efficacy and Tolerance of Anti-Tumor Necrosis Factor α Agents in Cutaneous Sarcoidosis: A French Study of 46 Cases. JAMA Dermatol 153: 681-685.
- Park SK, Hwang PH, Yun SK, Kim HU, Park J (2017) Tumor Necrosis Factor Alpha Blocker- Induced Erythrodermic Sarcoidosis in with Juvenile Rheumatoid Arthritis: A Case Report and Review of the Literature. Ann Dermatol 29: 74-78.
- Tu J, Chan J (2013) Cutaneous sarcoidosis and infliximab: evidence for efficacy in refractory disease. Australas J Dermatol 55: 279-281.
- 31. Philips MA, Lynch J, Azmi FH (2005) Ulcerative cutaneous sarcoidosis responding to adalimumab. J Am Acad Dermatol 53: 917
- Pariser RJ, Paul J, Hirano S, Torosky C, Smith M (2013)
 A double-blind, randomized, placebo- controlled trial of adalimumab in the treatment of cutaneous sarcoidosis. J Am Acad Dermatol 68: 765-773.
- 33. Kiorpelidou D, Gaitanis G, Zioga A, Bassukas ID (2008) Short course of infliximab for disfiguring lupus pernio. Eur J Dermatol 18: 727-729.
- 34. Kataria YP (1980) Chlorambucil in sarcoidosis. Chest 78: 36-43.
- 35. Waldinger TP, Ellis CN, Quint K, Voorhees JJ (1983) Treatment of cutaneous sarcoidosis with isotretinoin. Arch Dermatol 119: 1003-1005.
- 36. Brechtel B, Haas N, Henz BM, Kolde G (1996) Allopurinol: a therapeutic alternative for disseminated cutaneous sarcoidosis. Br J Dermatol 135: 307-309.
- 37. Inoue Y, Teraki Y (2020) Association of Propionibacterium acnes with the efficacy of minocycline therapy for cutaneous sarcoidosis. Int J Dermatol 59: 704-708.
- 38. Bachelez H, Senet P, Cadranel J, Kaoukhov A, Dubertret L (2001) The use of tetracyclines for the treatment of sarcoidosis. Arch Dermatol 137: 69-73.
- 39. Baughman RP, Judson MA, Lower EE, Drent M, Costabel U, et al. (2016) Infliximab for chronic cutaneous sarcoidosis: a subset analysis from a double-blind randomized clinical trial. Sarcoidosis Vasc Diffuse Lung Dis 32: 289-295.
- Heffernan MP, Anadkat MJ (2005) Recalcitrant cutaneous sarcoidosis responding to infliximab. Arch Dermatol 141: 910-911.
- 41. Carlesimo M, Giustini S, Rossi A, Bonaccorsi P, Calvieri S (1995) Treatment of cutaneous and pulmonary sarcoidosis with thalidomide. J Am Acad Dermatol 32: 866-869.
- Kalajian AH, Van Meter JR, Callen JP (2009) Sarcoidal anemia and leukopenia treated with methotrexate and mycophenolate mofetil. Arch Dermatol 145: 905-909.
- 43. Kouba DJ, Mimouni D, Rencic A, Nousari HC (2003)

J Clin Epid Toxic, 2024 Volume 5(3): 3-4

- Mycophenolate mofetil may serve as a steroid-sparing agent for sarcoidosis. Br J Dermatol 148: 147-148.
- 44. Damsky W, Young BD, Sloan B, Miller EJ, Obando JA, et al. (2020) Treatment of Multiorgan Sarcoidosis with Tofacitinib. ACR Open Rheumatol 2: 106-109.
- 45. Saylam Kurtipek G, Ataseven A, Kurtipek E, Kucukosmanoglu İ, Toksoz MR (2016) Resolution of Cutaneous Sarcoidosis Following Topical Application of Ganoderma lucidum Reishi Mushroom. Dermatol Ther Heidelb 6: 105-109.
- 46. Zhu X, Sun J (2020) A case of facial atrophic sarcoidosis in an adolescent successfully treated with the combination of prednisone and hydroxychloroquine. An Bras Dermatol 95: 340-342.
- 47. Lee JB, Koblenzer PS (1998) Disfiguring cutaneous manifestation of sarcoidosis treated with thalidomide: a case report. J Am Acad Dermatol 39: 835-838.

- 48. Rousseau L, Beylot-Barry M, Doutre MS, Beylot C (1998) Cutaneous sarcoidosis successfully treated with low doses of thalidomide. Arch Dermatol 134: 1045-1046.
- 49. Gharavi N, Diehl J, Soriano T (2015) Cutaneous Sarcoidosis Successfully Treated With Intralesional 5-Fluorouracil. Dermatol Surg 41: 1082-1085.
- 50. Fazzi P (2003) Pharmacotherapeutic management of pulmonary sarcoidosis. Am J Respir Med 2: 311-320.
- 51. Kaura V, Kaura SH, Kaura CS (2007) ACE Inhibitor in the treatment of cutaneous and lymphatic sarcoidosis. Am J Clin Dermatol 8: 183-186.
- 52. Wilsmann-Theis D, Bieber T, Novak N (2008) Photodynamic therapy as an alternative treatment for cutaneous sarcoidosis. Dermatology 217: 343-346.

Copyright: ©2024 Mohammed Abdul Qader Al Malmi. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

J Clin Epid Toxic, 2024 Volume 5(3): 4-4