Orf, also known as sheep pox, is a common disease in sheep-farming regions of the world. Human infection with the orf virus is typically acquired by direct contact with open lesions of an infected animal. However, infection from fomites can also occur due to the virus being resistant to heat and dryness. An infected person will usually have a single nodular lesion at the point of contact, on the hand or forearm.

The cause of orf is attributed to the orf virus. This virus is a member of the parapoxvirus genus which also contains milker’s nodule virus. The parapoxvirus genus is a member of the poxviridae family which also includes small pox and cowpox viruses. Orf is considered a zoonotic disease, meaning it affects animals; yet humans can contract the disease from infected sheep and goats. However, the orf virus is not transmitted human-to-human. Occupational acquisition of the disease is the most common means of contraction of the virus.

Once a human is infected with the parapoxvirus a nodular lesion will appear. This lesion evolves through several stages. It begins as a papule but then progresses into a lesion with a red center surrounded by a white ring. The lesion then becomes red and weeping. If the lesion is located in an area with hair, temporary alopecia (hair loss) occurs. With further progression, the lesion becomes dry with black spots on the surface. It then flattens and forms a dry crust. The lesion then heals with minimal scarring. The progression of this disease occurs in about 6 weeks. Other symptoms such as mild swelling, fever, pain or lymphadenitis may be noted.

The diagnosis of orf is made clinically with confirmatory studies to solidify the diagnosis. A small sample of the crust, tissue, or fluid can detect the parapoxvirus under electron microscopy. In addition, the histologic features observed from a regular biopsy can be used to confirm the clinical diagnosis. Finally, polymerase chain reaction (PCR) may also be used to identify the orf virus.

Because orf is a self-limiting disease, treatment is supportive. There is no definitive treatment for the orf virus, so the symptoms are managed until the lesion heals. Moist dressings may be applied to the lesion along with local antiseptics. For larger lesions (seen in immunocompromised patients) shave excision may improve the healing process. If a secondary bacterial infection ensues an antibiotic is warranted.