

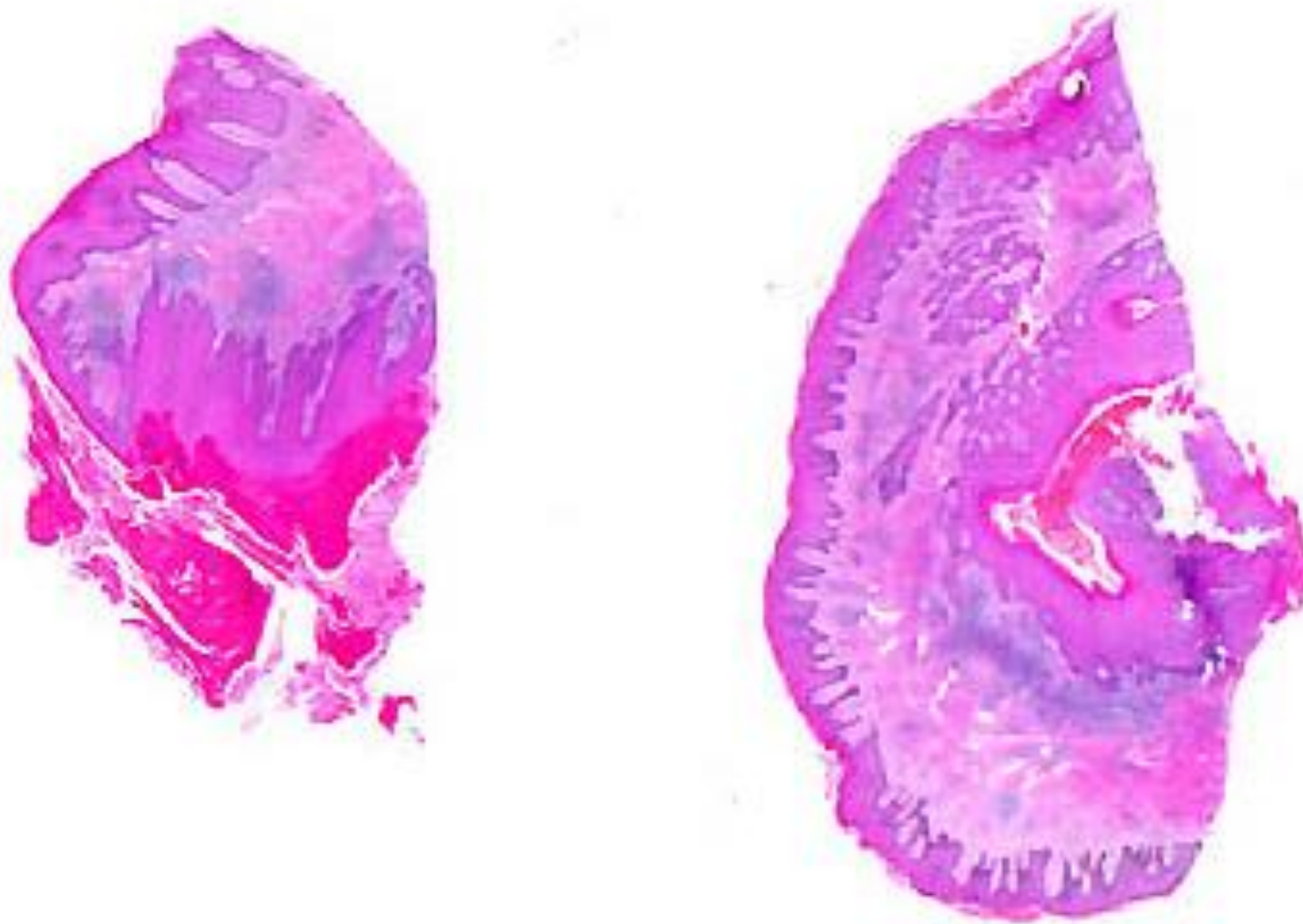
# Yaws (frambesia)

Yaws (frambesia) is a form of endemic treponematoses, caused by spiral bacteria, *Treponema pallidum* subspecies *pertenue* (*Treponema pertenue*). *T. pertenue* is genetically related to *T. pallidum* subspecies *pallidum*, which causes syphilis, bejel (endemic syphilis) and pinta. Yaws is found primarily in poor communities in warm, humid and tropical forest areas of Africa, Asia, Latin America and the Pacific. Most patients are children under 15 years of age living in rural areas far from health services. Poverty, low socio-economic conditions and poor personal hygiene facilitate the spread of yaws. Transmission is through person-to-person contact of minor injuries. The incubation period is 9-90 days with an average of 21 days. Yaws presents as a wart-like papilloma, and without treatment, the papilloma will ulcerate. Secondary yaws occurs weeks to months after the primary infection, and typically presents with multiple raised yellow lesions and painful swelling of long bones and fingers (dactylitis).

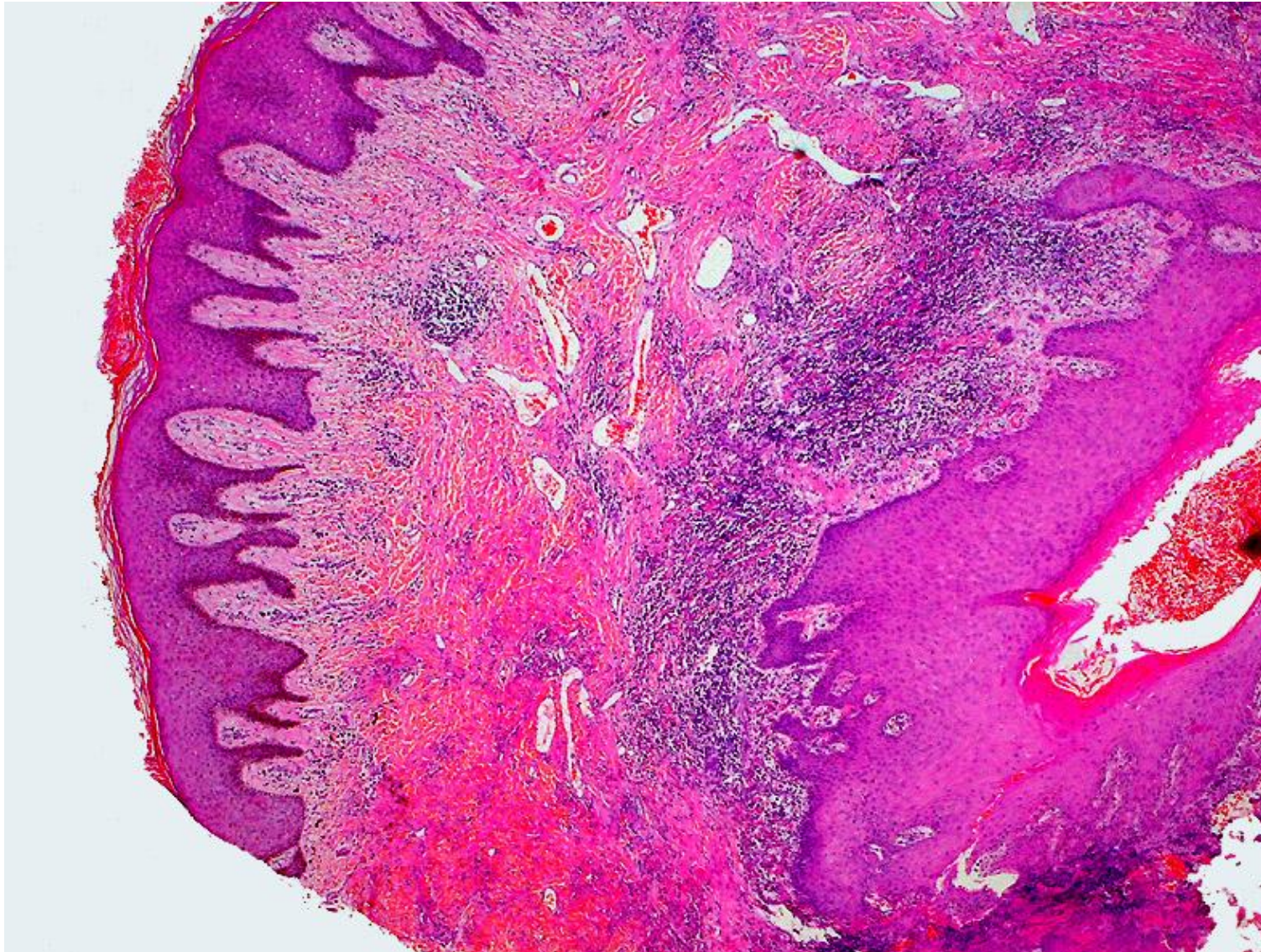
Ref.: Jones S. Yaws could soon be eradicated - 70 years behind schedule. Nature 2024 Jan 11. doi: 10.1038/d41586-024-00013-y



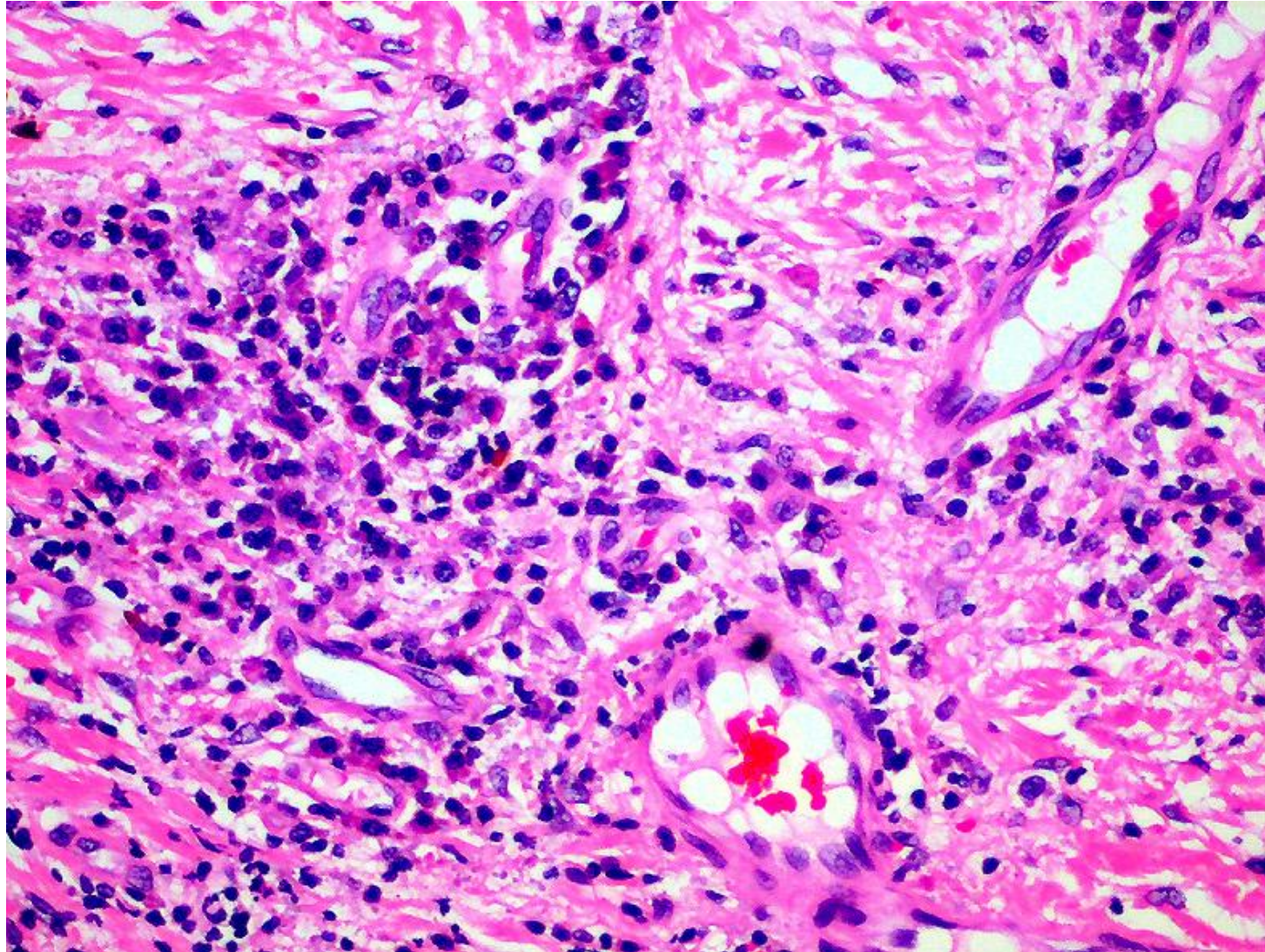
Yaws seen in an 8 y-o boy in Papua New Guinea. A raised yellow-colored, strawberry-like papillomatous lesion is formed on the skin of the foot.



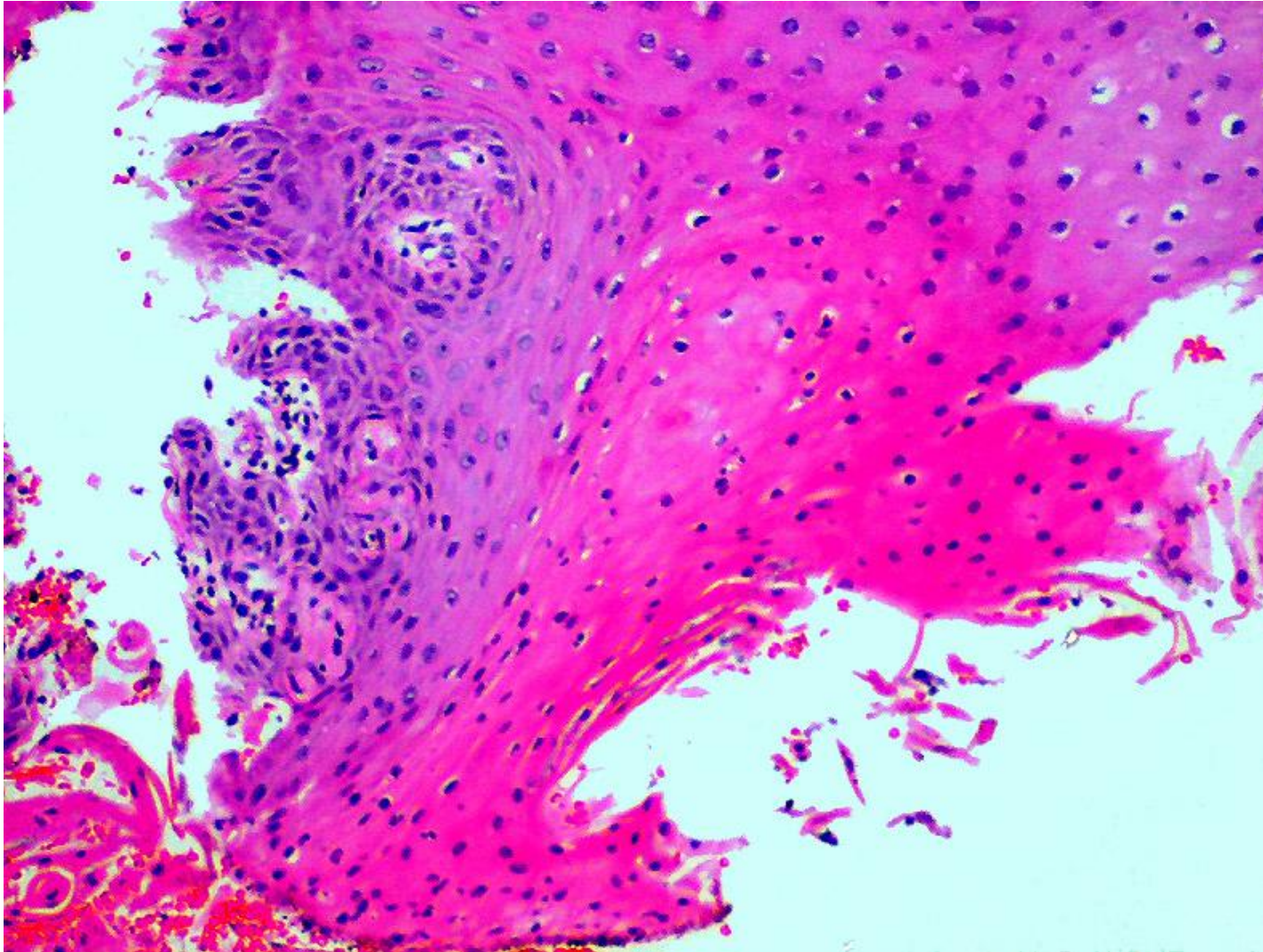
Yaws seen in an 8 y-o boy in Papua New Guinea. Microscopically, a papillomatous lesion reveals irregular acanthosis, hyperkeratosis and non-specific dermal chronic inflammation (H&E-1).



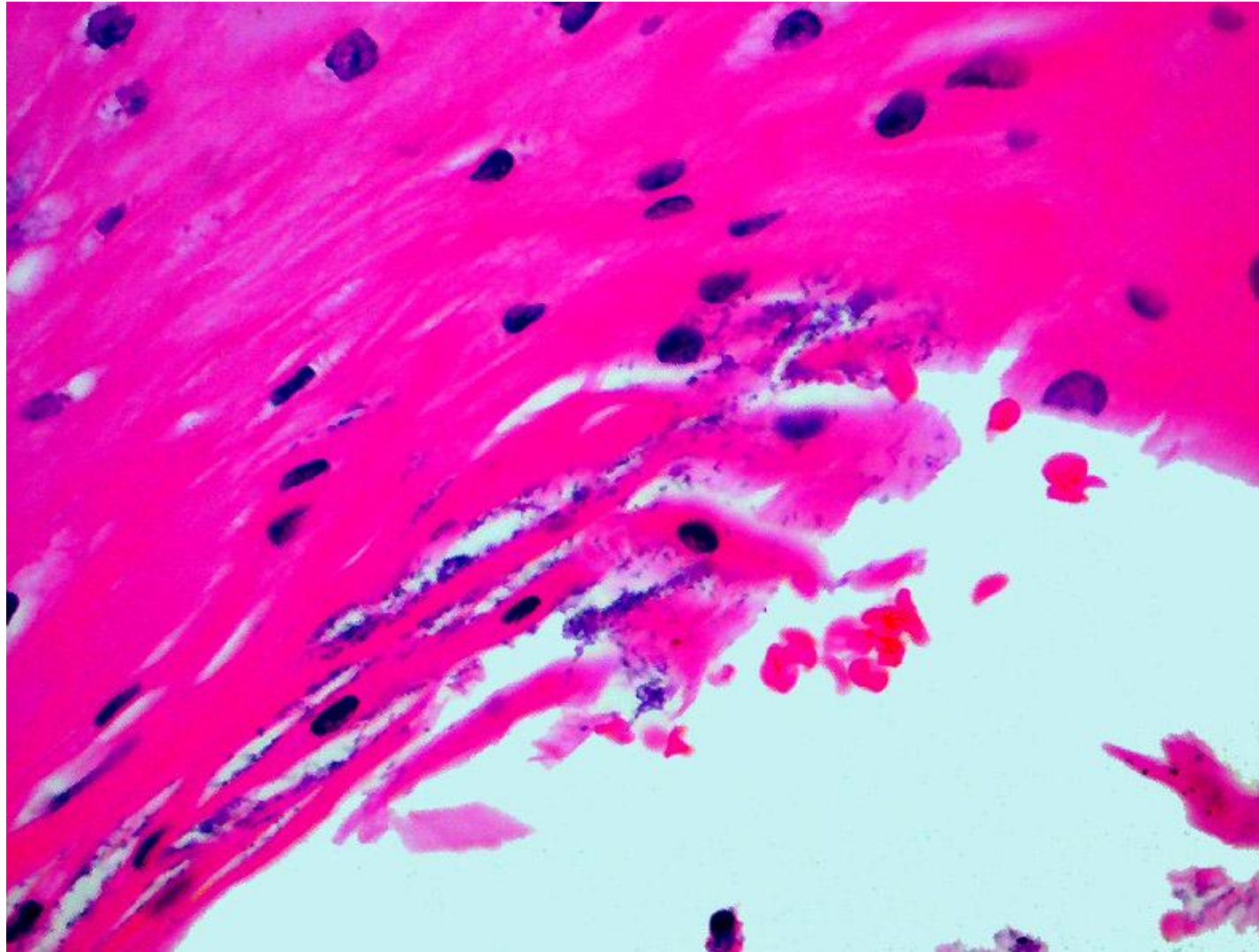
Yaws seen in an 8 y-o boy in Papua New Guinea. Microscopically, a papillomatous lesion reveals irregular acanthosis, hyperkeratosis and non-specific dermal chronic inflammation (H&E-2).



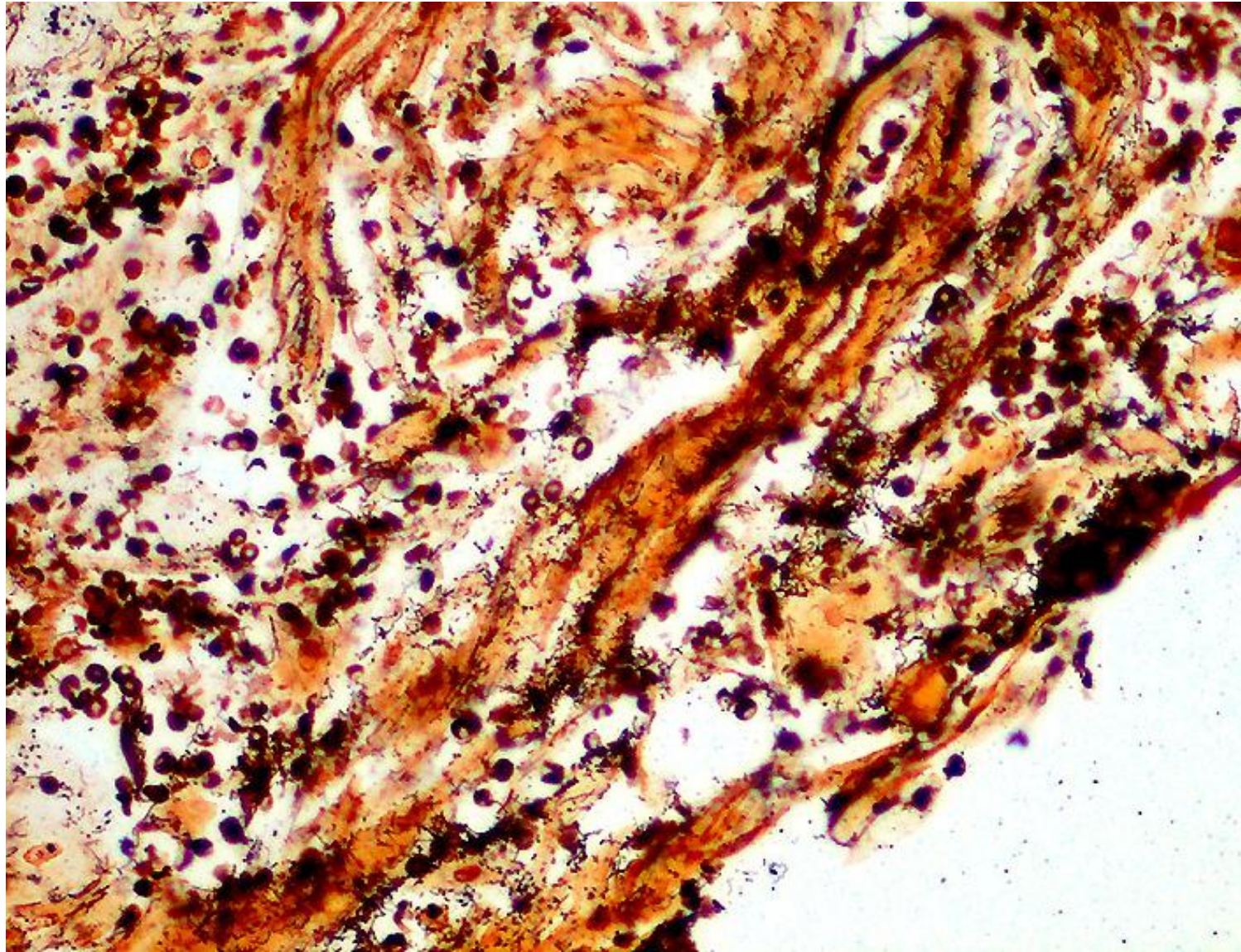
Yaws seen in an 8 y-o boy in Papua New Guinea. Microscopically, the dermis reveals non-specific chronic inflammation with infiltration of small lymphocytes and plasma cells (H&E-3).



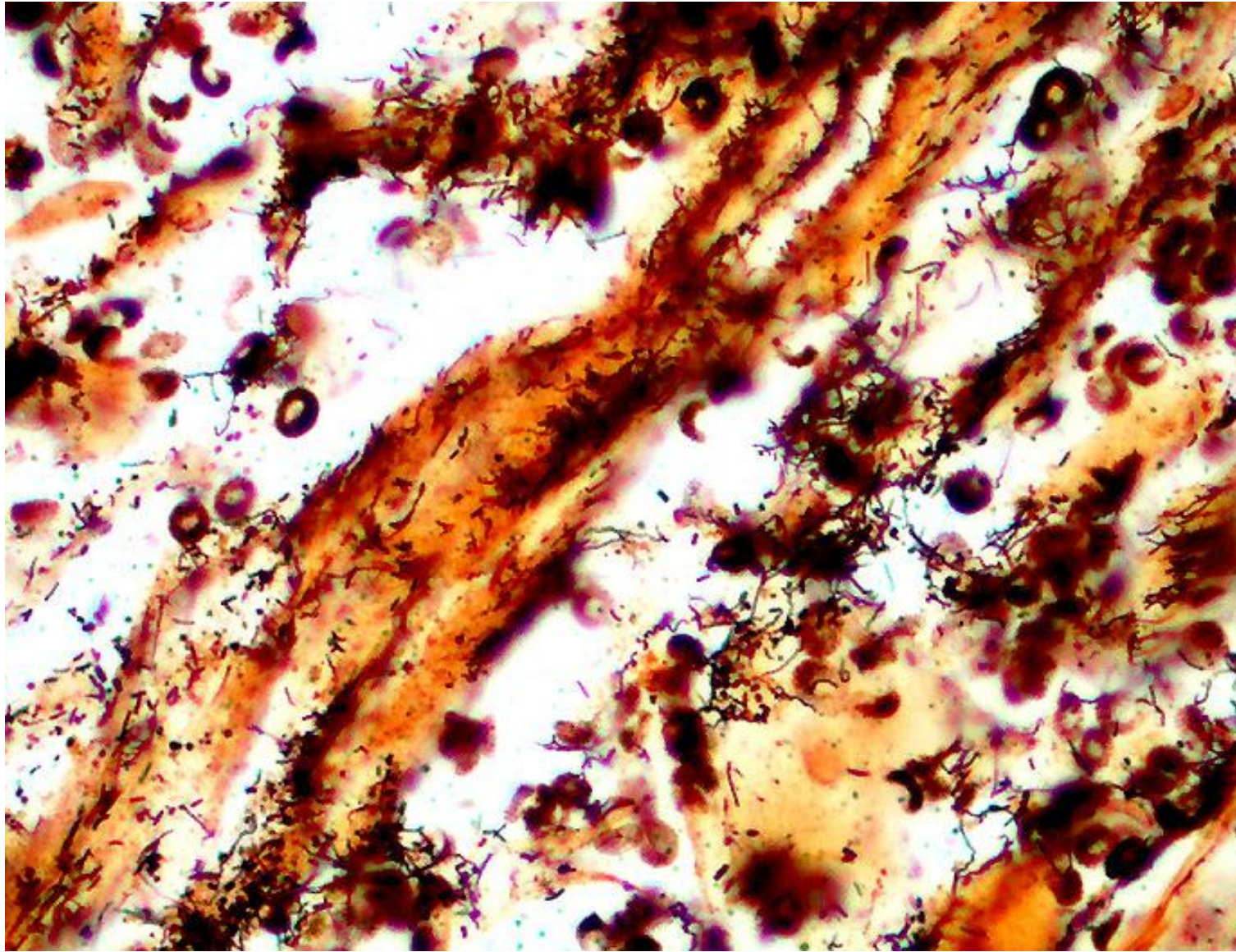
Yaws seen in an 8 y-o boy in Papua New Guinea. Microscopically, a papillomatous lesion consists of acanthosis and parakeratotic hyperkeratosis (H&E-4).



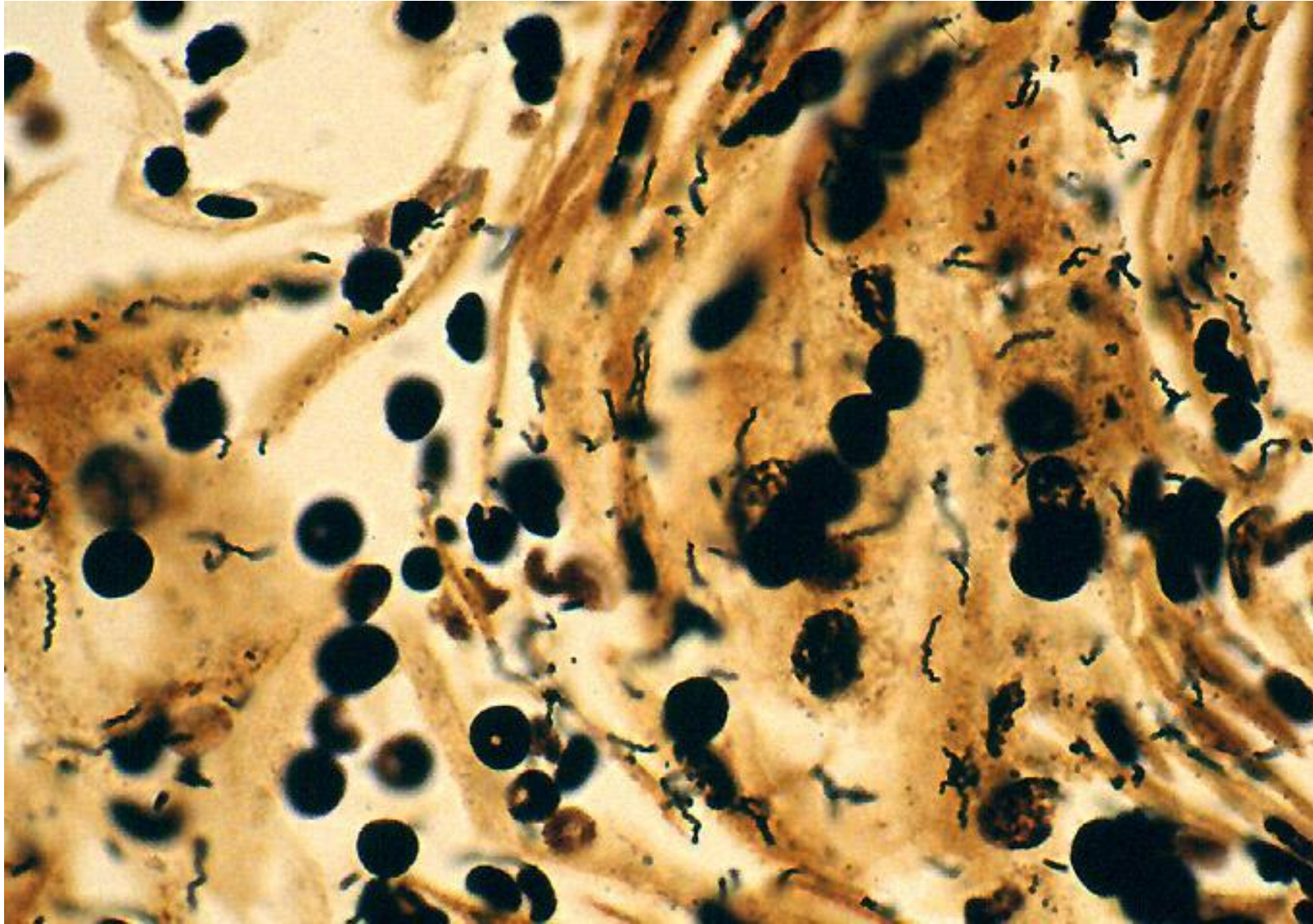
Yaws seen in an 8 y-o boy in Papua New Guinea. Microscopically, bacillary infection is observed on the surface of the parakeratotic hyperkeratosis (H&E-5).



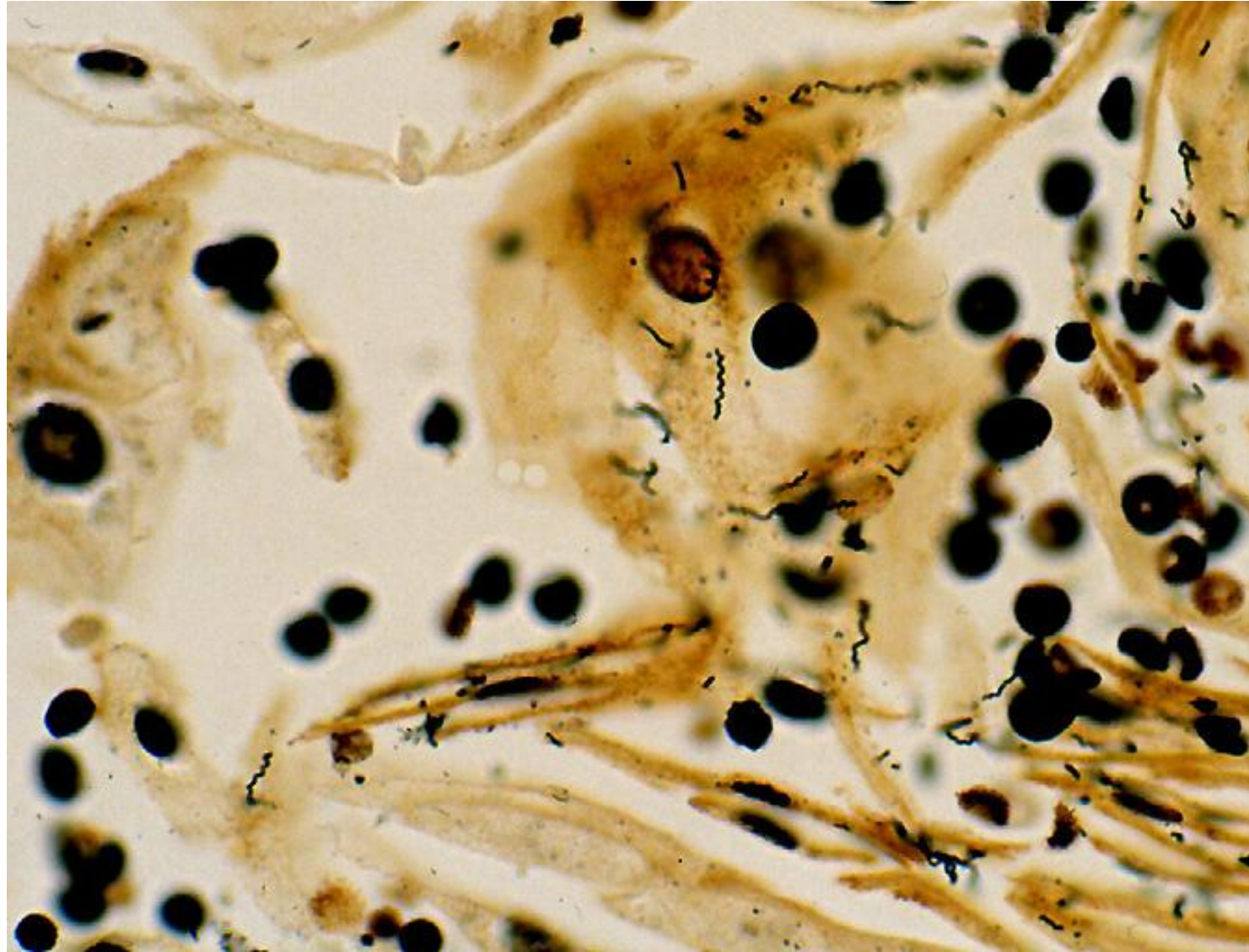
Yaws seen in an 8 y-o boy in Papua New Guinea. Microscopically, bacillary infection is observed on the surface of the parakeratotic hyperkeratosis (Warthin-Starry's silver-1).



Yaws seen in an 8 y-o boy in Papua New Guinea. Microscopically, bacillary infection with spiral configurations is observed on the surface of the parakeratotic hyperkeratosis (Warthin-Starry's silver-2).



Yaws seen in an 8 y-o boy in Papua New Guinea. Microscopically, infection of spiral bacteria is observed on the surface of the parakeratotic hyperkeratosis (Warthin-Starry's silver-3).



Yaws seen in an 8 y-o boy in Papua New Guinea. Microscopically, infection of spiral bacteria is observed on the surface of the parakeratotic hyperkeratosis (Warthin-Starry's silver-4).