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### Raynaud's phenomenon

Maurice Raynaud (1834-81) provided one of the finest legacies of descriptive medicine and clinically inferred physiology.<sup>12</sup> “. . . local syncope is a condition perfectly compatible with health . . . ordinarily females, sometimes without appreciable cause, one or more fingers becomes pale and cold all at once . . . It is the phenomenon known as 'dead finger'. The attack is indolent, the duration varies from a few minutes to many hours. The determining cause is often the impression of cold; . . . sometimes even a simple mental emotion is enough. It appears completely exsanguine . . . sensibility becomes blunted, then annihilated; fingers . . . can be pinched and pricked with impunity; may lose sense of contact and yet be able to distinguish heat and cold. Their temperature is notably lowered; He asks is the loss of movement due to a temporary paralysis? "This is hardly possible if one considers that this syncopal state is often limited to a single digit, . . . It is more reasonable to admit that the diseased part no longer transmitting sensation to the brain, the brain itself loses temporarily, for want of excitant, the power of determining movements." He continues by mentioning involvement of the toes and says the attack "is followed by a reaction, often very painful . . . in more pronounced cases the asphyxial element predominates, pallor is replaced by a cyanotic colour . . . skin had acquired a greater transparency than natural so as to allow subjacent tissues to be perceived; sometimes violet or slate coloured, even becoming black, . . ." He distinguished the condition from "concussion or compression of a nerve," and noted "feebleness of the pulse at the commencement . . . and the patch of white produced by pressure . . . takes a considerable time before recovering colour . . . which denotes an excessive slowness of the capillary circulation . . . painful numbness succeeds a sensation of burning and shooting . . . Meanwhile cutaneous anaesthesia is complete and interferes with the prehension of small objects. The period of reaction . . . irritating tingling sensations . . . livid patches a vermilion colour shows itself at the margin; little by little it gains ground, chasing before it the bronzed colour . . . at the periphery. Finally, a patch of deep red . . ." These observations lead onto sections on diagnosis and the nature of the disease in which he clearly recognises its vascular basis and its origin in "a disorder of the ganglionic system and the great sympathetic nerves of the neck described by M. Claude Bernard." Raynaud infers "a sort of painful cramp of the arteries, . . . spasm of vessels irregular or intermittent".

On treatment he advises "envelopment off the limb in close fitting cotton wool and, opium to calm the atrocious pains of mortification of the extremities." Most importantly, Raynaud stressed the benign nature of the condition and that "it is not a true gangrene which is produced".

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