

# **JOURNAL OF VAMPIROLOGY**



**VOL. II**

**NO. 3**

## Contents

Editorial (1)

The Epidemiology of Human Vampirology: Porphyria (2-14)

News Bulletins #1-#9 (15-24)

Corrections (24)



---

Journal of Vampirology, vol. 2, no. 3. Copyright © 1985 by John L. Vellutini. All rights reserved. Subscription rates: \$10.00 for 5 issues. Singles copies: \$2.00. Send check or money order to John L. Vellutini, P.O. Box 881631, San Francisco, CA, 94188-1631. All correspondence to this address. The back cover depicts George III of England in his declining years. Thought by many in his day to be insane, there are those today who now consider him to have suffered from porphyria.

## Editorial

I know, I know, late again. It appears as though my talent for creativity is far exceeded by my talent for procrastination. Laziness, if you will. Actually, I'm not that lazy. I've accumulated over a hundred pages of handwritten notes relative to articles yet to appear in the Journal. It's just that my fingers seem to develop a severe case of cold feet whenever I approach the typewriter. I'd send out copies of my handwritten notes instead, if I was confident my discerning readership could decipher them.

In all seriousness, effendis, this issue has been a real struggle to complete. I began the article on porphyria back in April, several months prior to Dr. Dolphin's pronouncements on vampirism before the American Association for the Advancement of Science. Because of the immense amount of personal research that went into pursuing this matter, the project eventually proved to be a slow and tedious affair. In truth, the entire year has proven to be one long struggle, what with illnesses, injuries and protracted bouts of creeping malaise. I've several times toyed with the idea of ceasing publication and forsaking the Journal forever. It has largely been due to those encouraging letters sent by you, the readership, which have helped sustain me through this "dark night of the soul," as theologians would term it. In order to forestall any future difficulties that might arise in publishing the Journal, I've decided not to publish it five times a year but on a quarterly basis. Not only will this allow me greater leisure in meeting my self-imposed deadlines, but will enable me to maintain the Journal at its current subscription rates by cutting expenses. As this issue represents only the third published this year, I hope to have the next available by the end of the year. (This year, he quickly qualifies.) Featured in this issue will be an article on mysterious blood flows, a phenomenon that has immense implications to vampirism, and a lengthy article on "Jung and Irish Vampires" by guest contributor, Daryl R. Coats.

Recently, several publications have come to my attention which may be of some interest to my discriminating readership. For those of you intrigued by the possibility of hollow earths and underground civilizations, I might recommend a subscription to Shavertron. Largely based on the writings of Richard Shaver, it covers a wide variety of topics as well, from UFOs to telepathic murder. Subscriptions are \$9.00 a year. Send check or money order to Richard Toronto, P.O. Box 248, Vallejo, CA 94590. The second publication is The Vampire Journal, edited by Sharida Rizzuto and Thomas Schellenberger. An excellent first effort, I highly recommend its purchase. Subscriptions are \$12.00 for one year and \$3.00 per single copies. Send check or money order to Baker Street Publications, P.O. Box 994, Metairie, LA 70004.

Carole Anne Lombardo, secretaire extraordinaire, writes to inform me that several new publications are now available from the Count Dracula Fan Club. For those intrepid souls among you who view life as one adventure after another, I might recommend Madeline X's How to Become a Vampire in Six Easy Lessons, a small pamphlet that represents a strange amalgam of European and Malaysian vampire folklore. Cost is \$3.99, plus 50¢ for postage and handling. For those less-than-intrepid souls, there is The Vampire in Verse, An Anthology, edited by Steven Moore. Cost is \$7.95, plus \$1.25 for postage and handling. Send check or money order to Dracula Unlimited c/o Fantasy Bookshop, Penthouse North, 29 Washington Square West, New York, NY 10011.

Lastly, I'd like to thank both Dr. Jeanne Youngson and Dennis Passero for providing me helpful material on porphyria as it pertains to vampirism.

See you all next time.

## The Epidemiology of Human Vampirism: Porphyria

In the Oct. 1979 issue of OMNI a curious letter appeared written in rebuttal to Bruce Wallace's proposal that rabies may have been the source of vampirism in centuries past.

(1) I quote as follows:

"It was nearly enough to rouse me before my accustomed nightfall when, among the cards and letters that have been wending their way here for the last, oh, 600 years or so, came the June issue of OMNI, with word of my supposed affliction reported by Bruce Wallace. If it could, my blood would have curdled.

"So now it is rabies that drives me to seek my lovely victims? Rabies? How plebeian! Your Mr. Wallace should stay home at night, with his doors bolted. If he can't tell the difference between me, the Prince of Walachia (sic), and my old friend Jack Homolupus. Hirsute as he is, Jack is best known as the Wolfman, and it is he who has rabies. A mild case, though. Louis Pasteur wouldn't even take him as a patient. But I digress ...

"From my father, though, I inherited my fondness for the night and my desire for the jugular, a vein of singular quality as it courses so conveniently up the neck, warm and blue. I become enraptured just thinking about it. You see, my father, and his before him -- and I could go on, but I don't wish to drive myself batty this early in the day -- had a slight ailment, a condition that we don't boast about, which the first king of your country had. It is called porphyria. Mary Queen of Scots passed it to King George III. (2) When I knew her, Mary had a lovely neck. Porphyria is mainly an inherited metabolic disorder in which the bodily pigment is overproduced, but I shan't bore you with the details. Let it be that the disorder makes my skin sensitive to the light, and I prefer the night, naturally. Over the years, and particularly from the exposure of full moonlight, some porphyrins have leached into my bones and teeth and, in regard to the latter, have caused erythrodontia, a reddish staining on the rapier canines. I rather fancy the effect.

If you are interested, erythrodontia shows up best under long-way ultraviolet rays, but few people care about this anymore, alas."

(Signed) Count Dracula. Whereabouts withheld. (3)

As far as I can tell, this is one of the first published accounts linking porphyria with vampirism. However, the Count was wrong in one respect. His lament that few people cared about this anymore proved wide of the mark. In Raymond T. McNally and Radu Florescu's The Essential Dracula, published in the same year, a further reference is made to this disorder. Discussing a passage from the novel in which Lucy Westenra's ultimately fatal illness is described: "These are also classic symptoms for one form of porphyria. Of course, Stoker did not know about this disease, as far as we know. The symptoms coincide with the vampire malady of folklore. Erythropoietic (congenital) porphyria sometimes produces a sickly pale-reddish hue called erythrodontia. The gums recede and expose the teeth. The teeth appear to become long, whereas actually they do not ... This phenomenon of seemingly prominent teeth and strange colors of gum and teeth is yet another link between vampirism, werewolfism, and the disease known as porphyria in its many forms." (4) Also in the same year Ian Woodward, in his The Werewolf Delusion, revived the theory (first proposed in 1969 by Dr. Lee Illis in his "On Porphyria and the Aetiology of Werewolves," Proceedings of the Royal Society of Medicine) that porphyria gave rise to the belief in werewolves. (5) Since 1979 the medical fraternity has vigorously championed this rare disorder as a source of traditional forms of vampirism. The most prominent proponent of this approach has been Dr. David Dolphin, a biochemist at the University of British Columbia, Vancouver.

On May 30th of this year, in a talk given before a meeting of the prestigious American Association for the Advancement of Science, Dr. Dolphin formally outlined his theory concerning porphyria as a source of vampirism. Although the biochemist had long maintained this view for years, the resultant publicity on this occasion proved to be worldwide. However, before we discuss his theory in detail, first a word about porphyria.

Broadly speaking, porphyria is primarily a genetic disorder characterized by a disturbance in porphyrin metabolism during the heme synthesis with a resultant increase of "free" porphyrins or porphyrin precursors in the system. There are as many as ten varieties of porphyria and the subsequent form each disease will take is largely dictated by that stage -- there are eight in all -- at which the maladjustment occurs during this complex process. Although the majority of these "free" porphyrins are excreted from the system, thereby giving the urine a distinctive pink or Burgundy red color and turning stools black, those that do remain are deposited in the tissue, bone and dentin of teeth.

Although Dr. Dolphin never specifies which of the bewildering array of porphyrias is directly responsible for vampirism, one can reasonably deduce that he is referring to one of five specific forms of porphyria. These are congenital erythropoietic coproporphyria, erythropoietic protoporphyria, erythropoietic uroporphyria, porphyria cutanea tarda hereditaria and porphyria cutanea tarda symptomatica. (6) All five of which evidence signs of photosensitivity, a crucial factor in linking these disorders with vampirism. Specifically, the three erythropoietic porphyrias are characterized by excessive deposition of porphyrin in the bone, teeth and tissue. According to Dr. Maxwell M. Wintrobe, in his Clinical Hematology (1967): "Exposure to light produces bullous and erythematous lesions of the skin. The skin often is sensitive to slight trauma. Round vesicles appear over the affected areas, central necrosis occurs and this is followed by development of pustules and, subsequently, deep scarring. Mutilation may become so severe as to produce loss of the fingers, nose or ears and leprosy may be suspected. Hypertrichosis often is present. Deposition of porphyrin in the dentin of the teeth causes them to appear bright red, brown or yellowish. Teeth which do not show erythrodonia in ordinary light may exhibit red fluorescence in Wood's light. If a strong source of ultraviolet light is caused to shine through the fingers, red fluorescence may be seen in the phalangeal bones. Abdominal and psychic or neurologic manifestations do not occur but anemia is seen frequently." (7) Among the two hepatic porphyrias, of which porphyria cutanea tarda hereditaria and symptomatica are examples, excessive porphyrin production is associated with liver dysfunction. Nonetheless, both manifest outward symptoms similar in nature to those found in the erythropoietic porphyrias.

According to newspaper accounts of Dr. Dolphin's theory, the manifest symptoms are described as follows: "The most severe clinical symptoms of the porphyrias can be ghastly indeed: extreme sensitivity to sunshine and almost any other light, leading to scarring and mutilation of the face; loss of tissue around the mouth, nose and eyes; deformed fingers and toes that begin to look like claws, and teeth that become stained brown or blood-red and appear like fangs protruding from taut lips and gums. Excess hair can be another symptom, and victims of the final stages of the disease may suffer from raging mania and seizures similar to severe epilepsy." (8)

Referring to werewolves first, Dr. Dolphin outlines the following scenario: "Imagine, if you will, the manner in which an individual in the Middle Ages would have been received if he only went out at night and when he was seen he would have an animal look about him -- being hairy, large of tooth and badly disfigured. It seems more than likely that such people might well have been considered werewolves." (9)

Addressing the phenomenon of vampirism next, Dr. Dolphin continues: "A major clinical treatment of some porphyria is an injection of heme [a constituent of blood which allows for the transport of oxygen throughout the body and which is formed by a combination of porphyrin and iron]. And since in the Middle Ages an injection of the red pigment of blood would not be possible, what else might take its place? It is our contention that blood-drinking vampires were in fact victims of porphyria trying to alleviate the symptoms of their dread disease. The folklore concerning the nocturnal behavior of vampires would, of course, be consistent with their photosensitivity." (10) Dr. Dolphin also suggests that inbreeding among closely-related individuals might have resulted in a high incidence of porphyria (i.e., vampirism) in certain families and thereby encouraged the belief that victims of vampiric attack became vampires in turn. As summarized in the New York Times: "(Dr. Dolphin suggests) that brothers and sisters could have shared the defective gene that causes the disease, but that only one of them might have experienced symptoms of the disease. If that victim then bit a sibling to get blood, the shock of the experience might have triggered an attack of the disease in the bitten sibling, thus producing another vampire." (11) Interestingly, the biochemist reaffirms the prophylactic properties of garlic in averting vampiric attack. According to him, this noxious bulb contains a chemical called dialkyl disulfide, a substance that blocks the oxygenation process in heme and thus would only attenuate the porphyria sufferer's symptoms. For the most part, this represents the essential nature of Dr. Dolphin's theory linking porphyria with vampirism. A more detailed account is expected to appear shortly.

Unfortunately, even a cursory examination of the vampire legend will show how untenable this elaborate theory really is. Take the vampire's propensity for blood as starters. One major objection I have with the majority of theories recently proposed to account for vampirism is that they are entirely too hemocentric in nature, that is, too much emphasis is placed on the practice of blood-drinking. Although hemophilism is one of the more characteristic features of legendary vampirism, lately it seems as though both categories have become synonymous with one another, when in actual fact blood-drinking represents only one small aspect of a very complex phenomenon. As I've continuously stressed in previous issues of the Journal, apparently with little effect, blood-drinking is far from being universal in terms of vampirism. In many instances, vampires are said to be more akin to psychic leeches and seemingly drain their victims of their bioenergies without resort to more sanguinary measures. In the following account, for example, its veracity attested to by Monseieur de Vassimont, special envoy to Moravia for his Royal Highness Leopold I, Duke of Lorraine, the vampire could just as readily exert its malign influence even in the absence of physical contact: "(I)n those districts it was no unusual thing to see men who had been dead for some long time suddenly appear in the midst of a general assembly, and that not infrequently they entered a room and took their place at table with friends or acquaintance, that they never uttered a word, but that some sign either with the head or the hand was given to one of those present and that this person almost certainly died not very many days later." (12) Still others preferred a more violent course of action, either strangling their victims into submission or scaring them to death. Schertz's account concerning the herdsman of Blau, cited in the article on allergies, is a typical example of this. Notwithstanding the absence of blood-drinking, the herdsman-cum-vampire nonetheless managed to exhaust the vitality of some, suffocate others and frighten an equal number to death. Numerous other instances could be cited.

That Dr. Dolphin is unable to provide any documented accounts of porphyriacs developing a craving for blood due to this disorder severely mitigates the plausibility of his theory. Even granted such a possibility in centuries past, Dr. Dolphin nonetheless concedes that he is uncertain about the therapeutic aspects of consuming blood orally and whether the heme content of blood could be effectively absorbed through the walls of the stomach to any beneficial degree. (13) A telling point since, despite

its fluid appearance, blood is a semi-solid consisting essentially of protein and water. Large and atomically complex, the molecular weight of an average red blood cell is 68,000 compared to that of 18 for water. (14) As can be readily discerned, the digestion of large quantities of blood might prove a formidable task indeed. (15)

Alternately, iron-deficiency due to porphyria has also been suggested as a possible correlative of vampirism. According to Dr. Lionel Milgrom of the Imperial College in London: "Iron is very necessary for [porphyria] sufferers and one of the most effective ways of taking it is by drinking blood." (16) This astonishing claim also seems to be lacking in foundation. One wonders why someone so afflicted would react subliminally to this disorder by resorting to such extreme measures as drinking blood when so many iron-rich foods, as liver, spinach, egg yolk, etc., were readily available. Not only does this assertion ignore the dubious therapeutic value of blood when taken in this manner, but it overlooks the individual complexities which characterize each form of porphyria. For instance, of the five aforementioned varieties, the erythropoietic porphyrias evidence only slight iron-deficiency whereas the hepatic porphyrias occasionally give rise to iron overload. So much so, that venesection is sometimes performed in order to alleviate this excess from the system. Consequently, to suggest that the drinking of blood might ease a porphyriac's suffering represents a potentially dangerous prescription of sorts, made all the more irresponsible by the fact that iron-supplements are readily available to most. (17)

Actually, if iron-deficiency is so crucial a factor, I'm surprised no medical authority has yet associated menstruation with vampirism, as the former commonly induces iron-shortages in women. (18) Although vampirism has long been associated in the public mind with the male gender, it is only in the vampire epidemics of the late 17th and early 18th centuries that men were frequently linked to vampirism. In both ancient Western society and Third World culture, women predominate in this category. Symbolically, there are just as many uterine overtones to vampirism as there are overtly sexual ones. The Freudian concept of the "vagina dentata" is not without some merit and it seems to be a universal component of castration fears. But more on this in my forthcoming article entitled "The Psychoanalytic Aspects of Human Vampirism."

Unlike blood-drinking, the attributing of photosensitivity to the vampire represents personal speculation rather than folklore. I had always assumed (perhaps naively) that the vampire logically preferred the hours of darkness because it allowed for stealth and the element of surprise, two factors which animal predators commonly exploit to their advantage. Be that as it may, the belief that the vampire restricts its activities to the night is once again a common misconception. Among the Greeks, in particular, the vampire was frequently said to appear during the day. According to Leone Allacci, in his famous treatise on Greek customs: "They say that this monster is so destructive to men that sometimes he actually appears in the full daylight, even at noon, and that not only within houses, but in the fields and on the high roads and in the enclosures of hedged vineyards, and he does not spare to advance in a threatening manner upon passers-by or any who happened to be going that way, and so horrible is mere appearance and look that he slays men without a word or without touching them." (19) Writing twelve years later, the Frenchman Richard remarks: "I have been assured by one who was most trustworthy and whose word must be believed that in the island of Amorgos these dead persons who are supposed to have returned to life sometimes prove so bold that not only do they wander abroad at night time but in the full light of day they may be seen, sometimes as many as five and six together in the fields and open country ..." (20) According to Montague Summers, paraphrasing a passage from Schertz, the mountainous regions of Silesia and Moravia were so infested with vampires that "not only do they appear at night but they are often seen during the day." (21) Sir Rennell Rodd's account of the Greek vrykolakas, cited in the article on allergies, also seems suggestive of diurnal activity. As it was, some Orthodox theologians chose to compare the vampire to the noon-day devil of Biblical note

because of the former's propensity for appearing at midday, not the most propitious of times for anyone suffering from photosensitivity to emerge. (22) And, as mentioned previously, Dracula does make several appearances during the daytime. (23)

The rapid disintegration of the vampire on being exposed to sunlight, so dramatically choreographed in the finale to Horror of Dracula (1958) and less skillfully depicted in other films, also appears to be more a product of cinematic license than folklore. In those rare instances in which relatively preserved bodies have disintegrated on having their remains exposed after centuries of burial, the deleterious effects of oxygen and not sunlight are responsible. The open lesions, scarring, and mutilation so characteristic of someone suffering from photosensitivity are noticeably absent in accounts concerning vampirism. Indeed, it was often remarked that the suspect corpse appeared in better health following death than it did while living. During the massive exhumations that took place in the cemetery at Meduegna, Yugoslavia, in 1732, one reads such comments as these from the detailed proceedings: "The body of the woman, Stana [buried three months previously], was untouched by decomposition. When it was opened the chest was found to be full of fresh blood, the viscera had all the appearance of soundest health"; "Stanjoika, the wife of a heyduk, twenty years old. She died after a brief illness of three days and had been buried more than a fortnight before. Her face was full and florid; the limbs supple and without cadaverous coldness. The viscera were sound and healthy. The skin appeared fresh and comely in life," and so on. (24) One woman, who had been buried for over three months, was declared by an acquaintance "to look better and to be far plumper than during life." (25)

Admittedly, there are some instances, as in the preceding quote from Allacci, where vampires are described as possessing horrible visages, an indication of some possible facial disfigurement. These descriptions, however, are largely confined to the Kallikantzari of Greek folklore who, according to Summers, "appear as ineffably hideous monsters with black distorted faces, eyes glaring red like fire, huge ears such as those of a donkey, great gaping mouths furnished with a slobbering scarlet tongue and sharp gleaming teeth, from which streams their fetid breath in horrible gusts." (26) Allacci describes their fingernails as being of "terrible length like the talons of a bird of prey whilst their hands become as crooked claws," the latter a feature sometimes found in more extreme cases of porphyria. Of those that were said to have human origins, it was believed they evidenced their cruel dispositions early in childhood by "attacking and devouring" their brothers and sisters. (27) This is reminiscent of Dr. Dolphin's assertion that incipient vampirism often arose at this time between siblings. As if this were not enough, the Kallikantzari were more likely to become vampires after death than others less predisposed. These semi-mythological creatures, of whose exact origins are still in great dispute among scholars, seem to come closest to Dr. Dolphin's concept of the porphyriac-cum-vampire.

Yet, apart from this allied species, seldom did vampires manifest the outward symptoms of porphyria. This is equally true of those individuals said to be victims of purported vampiric attack. This seems all the more inexplicable when one considers that Dr. Dolphin would have us believe the seeds of vampirism were sown in childhood. Even if the adverse effects of photosensitivity were somehow circumvented on these occasions, it fails to explain why the tell-tale red urine of the porphyriac is wholly absent from these accounts. This is particularly odd when one considers how much value was placed in times past on the color of one's urine in determining the nature of the illness involved. I'm confident that this unusual feature, if present, would not have gone unrecorded of persons said to have been vampirized.

Another mitigating factor is the extreme rareness of most porphyrias, particularly the erythropoietic disorders. For instance, erythropoietic uroporphyrinemia (sometimes known as congenital erythropoietic porphyria) is extremely rare -- Geoffrey Dean in his The Porphyrias (1971) records only fifty families worldwide -- a far cry from the

prevalence with which the vampire epidemics of the Middle Ages were characterized. Nor are the hepatic porphyrias, more frequently diagnosed than their erythropoietic equivalents, all that common when compared to other genetic disorders. Although porphyria has been reported in all major races -- for instance, the Bantu of South Africa are subject to a unique form of porphyria cutanea tarda -- the disorder is generally specific to Northern Europeans and kindred racial derivations. During my research into the matter, I was unable to discover a single recorded instance of porphyria from Eastern Europe or Greece, the two areas in which the belief in vampires attained its greatest prominence.

The joker in the pack is porphyria cutanea tarda symptomatica, a hepatic porphyria. Unlike other forms of porphyria, it is not primarily genetic in nature and is commonly caused by excessive alcoholic intake. Birth control pills and certain fungicides have also been linked to this disorder. (28) Therefore anyone might conceivably be subject to this disorder given the requisite factors. Interestingly, there does exist some folklore confirmation to the effect that alcoholism and vampirism were at one time intimately associated with one another. In Romania, for instance, those who died as the result of heavy drinking were said to become vampires after death. Professor Harry A. Senn, in his Were-wolf and Vampire in Romania (1982) comments thusly: "The Croats call the vampire pijawica (from the root pit, 'to drink'); the Serbians, referring to a red-faced hard-drinking man, assert that he is 'blood-red as a vampire'; and both the Serbians and Slovaks denote a hard drinker as a vlkodlak [vampire]. One of my informants in the village of Sant (Bristrita-Nasaud) called heavy drinkers 'stogoi' [witches or vampires]." (29) However, the more extreme symptoms characteristic of the erythropoietic porphyrias, such as photosensitivity, lesion formation and scarring, are not as pronounced as in porphyria cutanea tarda symptomatica. Nor is there any neurologic involvement which could give rise to psychotic behavior.

As a historical footnote to the above, it should be noted in all fairness that there did exist a sizable population of Germans in Transylvania during the 12th and 13th centuries, anyone of which might have carried the genetic potential for porphyria. (30) Unfortunately, this settlement proved short-lived. During the mid-thirteenth century, the majority of these immigrants were brutally put to death by the Tartars who, under the leadership of Batu Khan, had only recently invaded Eastern Europe. As the Germans had strictly maintained their ethnic homogeneity while in residence, it seems doubtful that porphyria was transmitted to the local populace through intermarriage prior to the massacre. Yet this tragic episode may have given rise to a remarkable set of events. There may be those of you who recall the article "Was the Pied Piper a Vampire?" reprinted in issue #2 of the Murder Exchange. This news item, published on the 700th anniversary of Hamelin's deliverance from an infestation of rats by the Pied Piper, suggested that this mysterious personage kidnapped the town's children not in retaliation for having his services go unrewarded but in order to help colonize territories in Eastern Europe, including Transylvania. As the Tartars had retreated from much of Eastern Europe by the time (1284) the events in Hamelin took place, it is quite possible that a second attempt was made to reintroduce Germans, particularly in those areas devastated by the recent incursions. (31) Once again, it is conceivable that some of these abducted children carried the genetic trait for porphyria. No doubt, because of their extreme youth, their ultimate fate was decided for them by their captors, with dispersal to areas where their labor was most needed. No better than slaves, these hapless children were probably unable to preserve their racial integrity and may have eventually been assimilated into the local populace, thereby introducing porphyria through intermarriage and transmitting it to generations to come. (32)

Still further, we have Philip Michaels' Come, Follow Me (1983), a work of fiction concerning a latter-day Pied Piper. The author concludes the novel by quoting the journal of one Gotha, a Medieval scholar and contemporary of the fabled rat catcher.

Having devoted the best part of his life to determining the true nature of this mysterious figure, the aged scholar writes: "It seems that in the land of Transylvania a strange race of subterranean creatures has been observed. They speak in unknown tongues and dress in odd patchwork rags [the Pied Piper was similarly dressed]. It is also said that they venture out only at night, and that a haunting music accompanies them, paralyzing their human victims, upon whom they delight in feeding." (33) Whether Michaels was aware of the aforementioned legend linking the Piped Piper with Transylvania cannot be ascertained. (34)

Dr. Dolphin further contends that erythrodontia, or the reddish-brown discoloration of dentine by porphyrin deposits, contributed materially to the vampire legend. Since the lips and gums often recede or shrink in cases of erythropoietic porphyria, the teeth are commonly exposed and appear more prominent than they normally would. In the past this feature might have given rise to the false impression that the individual so afflicted possessed fangs like some animal carnivore. The presence of erythrodontic discoloration may have heightened this effect, the assumption being the reddish-brown pigmentation signified the bloody residue of the vampire's latest victim. Unfortunately, there is little evidence for this in accounts of vampirism. In those few instances in which the vampire's teeth are mentioned, they are described as "shining" or "gleaming," terms hardly suggestive of discoloration. It could be argued in rebuttal that the use of such terms implied that, as is occasionally the case in erythropoietic porphyria, the teeth were capable of fluorescing. Although the European vampire was at times capable of giving off a bright effulgence, it was only on those occasions when it assumed the form of a "will-o-wisp" or "jack-o-lantern." (35) Furthermore, since exhumations of purported vampires were invariably performed during the daylight hours, it is unlikely that any fluorescence or luminosity present was distinctly visible to the naked eye. Even in cases involving fluorescence in porphyriacs, a strong source of ultraviolet or Wood's light must be trained on the area in question before this process occurs. The widely held but mistaken belief that vampires possessed fangs is more a product of popular fiction and Hollywood than folklore. (36) That the skin tissue customarily contracts about the oral cavity in some instances of porphyria runs contrary to accounts which describe the vampire's lips as thick or full. Indeed, Montague Summers, in his The Vampire in Europe (1929), consistently refers to these lips as "blub red" in appearance. (37)

But the most telling objection to Dr. Dolphin's medical theory (however ingenious it may seem) is that porphyria remains indisputably a disorder of the living and not the dead. Why porphyria (even when misdiagnosed) should have become associated in ages past with creatures who were understood (and this is fundamental to the belief in vampires) to resuscitated corpses seems a contradiction in terms. No doubt conceiving of the vampire as simply some poor unfortunate afflicted with some exotic disease helps facilitate a more rational interpretation of a seemingly inexplicable phenomenon, yet too much is ignored or sacrificed in the process of doing so. No one theory can hope to do justice to vampirism's inherent complexity. And, to reiterate, any theory which fails to take into account the vampire's undead state (whether it be actual or alleged) will ultimately be, in my opinion, found wanting. As will be clearly demonstrated later in this paper, porphyria, if and when it did manifest itself in the past, was not confused with vampirism but attributed to some other occurrence.

What similarities, then, might there exist between porphyria and vampirism? One such parallel is the claw-like appearance the hand sometimes assumes in cases of porphyria and which is largely due to osteoporosis of the distal phalanges. This singular feature is also frequently met with in vampirism. However, it is an established fact that both hair and nails will continue to grow for a short time following the cessation of life. Cellular death is not uniform and portions of the body least effected by putrefaction are those which lack an adequate supply of blood, such as the extremities. In reference to this matter, Augustin Calmet, the 18th-century authority on vampires,

writes: "With regard to the growing of the hair and nails in uncorrupted bodies, there is nothing in it but what is easily accounted for. These bodies still retain a slow and imperceptible circulation of their juices, which produces this effect, just as onions will grow and shoot after they are taken out of the earth, and consequently can receive from thence no moisture or nourishment. The same will hold good with respect to some flowers, and may be extended to most cases which depend upon the vegetation of plants or animals." (38) In some instances this growth defies all rational explanation. Take the case of St. Catherine of Bologna (d. 1463), whose incorrupt remains are still exhibited to the faithful: "(F)or more than seventy years the nails of her fingers and toes grew like those of a living person and used regularly to be cut." (39) However, these claw-like appendages are frequently typical of yet another disease and this similarity will be explored in more detail below.

Although the vampire's scalp hair was said to grow as well, never was it so generalized as to approximate hypertrichosis. (40) Actually, porphyria seems more reasonable an explanation when applied to werewolvery than vampirism. Not only is pronounced hirsutism present in both instances, but any acute sensitivity to light may have obligated the werewolf to limit his activities to the nighttime. This latter practice might have indirectly given rise to the belief that the full moon acted as some sort of catalyst in perfecting this lupine transformation. The homicidal behavior of the werewolf is also readily explained. Compelled by a blood-lust the result of some inherent disorder, the werewolf was driven to kill and kill again to assuage this unholy thirst. However appealingly dramatic this scenario sounds, it does nonetheless possess some fatal flaws. Seldom was werewolvery believed to have a constitutional source of origin. Although breech births, infants born with cauls or teeth in their mouths, were deemed predisposing factors in giving rise to the werewolf taint, more commonly such transformations were accomplished through supernatural means. Compacts with the devil, diabolical unguents composed of baby fat and toxic herbs, magical belts, pelts and girdles, all were said to achieve the same effect. Contrary to popular belief, the full moon was never integral to this transformation, although Hollywood would have us believe otherwise. No doubt if some werewolves chose to forage for prey during this time, the decision was dictated more by practical reasons than any uncontrollable behavioral influence. Any light afforded by the moon's presence was better than no light at all. When transformation was achieved, there was little to distinguish the witch-cum-werewolf from a normal wolf. (41) The concept of a humanoid lycanthrope walking on its hind limbs is simply one more example of artistic and cinematic license. Furthermore, this transformation was never permanent. On returning to his human form, there was nothing to distinguish the covert werewolf from his neighbor, no mean feat if the individual suffered from hypertrichosis. It could be argued in defense of porphyria that by cannibalizing his victim and, presumably, drinking some blood in the process, the porphyriac-cum-werewolf achieved some alleviation of his symptoms. Yet, apart from the questionable therapeutic value of taking blood orally, there still exists no concrete evidence to conclude that those who suffer from porphyria-induced hypertrichosis are given to episodes of blood-lust or criminal behavior. Indeed, what little is known of this matter suggests that those so afflicted in this manner are retiring by nature and shun most human contact. As examples of this, I would refer the reader to the several tabloid articles reprinted at the close of this article. (42) One further objection might be mentioned. Although photosensitivity may have been a factor in certain instances, werewolves nonetheless frequently killed with impunity during the daylight hours and their bestial ferocity was in no way diminished by this practice. This might account for the fact that youthful shepherds herding their animal wards during the day were the favored targets of the werewolf.

As I near the end of this article, one last criticism should be raised. In the published accounts concerning porphyria as applied to vampirism, I have observed an apparent "lumping" together process emerge, in which the symptoms of several porphyrias are combined to give the theory a more convincing façade, when these porphyrias taken sep-

arately fail to account for vampirism on their own. For instance, the "raging mania and seizures similar to severe epilepsy," sometimes resulting in psychotic outbursts of behavior, are symptoms characteristic of acute intermittent porphyria, a hepatic representative of this disorder. Hypertrichosis and photosensitivity are not numbered among its symptoms. In contrast, the erythropoietic porphyrias possess these latter two properties but fail to manifest any neurologic or psychological involvement. Therefore, it behooves the researcher to carefully distinguish between the various porphyrias and recognize their inherent diversity, otherwise distinctions begin to blur and mergings occur. With anywhere up to ten varieties of this disorder, a certain scrupulousness is required at all times.

Unlike Dr. Dolphin's detractors, I readily accept the possibility that porphyria existed as some troublesome disorder in ages past. The criticism that porphyria "could not have given rise to vampire stories because no one in the Middle Ages knew that its victims had a blood deficiency" actually lends confirmation to the biochemist's theory. (43) Not that porphyria customarily went undiagnosed. Rather, the disorder was consistently misdiagnosed, its external symptoms confused with something else. Dr. Dolphin claims it was vampirism. I believe the medical evidence points elsewhere.

Leprosy, or Hansen's disease, is caused by a bacillus known as *Mycobacterium leprae*. (44) There are three recognized forms of this disease: dimorphous, tuberculoid and lepromatous, the last-mentioned representing its most extreme manifestation. Although the disease's actual mode of transmission is still not clearly understood, the initial source of infection appears to be the pustular discharge from some active sufferer. The bacillus then enters its prospective victim either through the skin or via the mucous membranes of the nose and throat. Far from being the contagious disease as was once believed, the symptoms manifested, particularly in its lepromatous form, are both numerous and dramatic. Only a small sample of these symptoms can be listed, such as: loss of sensation and paralysis of the muscles, chronic ulceration and lesion formation accompanied by foul-smelling exudations, gross deformation of the face and extremities, with potential loss in time of the individual's nose, fingers, toes, etc. It is no wonder then that such poor unfortunates were invariably shunned by all and rigorously segregated in ages past.

As cited previously in this article, Wintrobe's description of erythropoietic porphyria mentions in passing that leprosy is sometimes erroneously suspected. According to Binford, in his Communicable and Infectious Diseases: "The mimicry of the disease [leprosy] is so great that it has to be differentiated from many diseases, including syphilis, psoriasis, fungous infection, various types of dermatitis, erythema multiforme, peripheral neuritis of other types, Raynaud's disease, and many others." (45) By the same token, as Saul Brody avers, in his The Disease of the Soul: Leprosy in Medieval Literature (1974), "if leprosy is often diagnosed as another disease, other diseases are often diagnosed as leprosy." (46) Even Dr. Milgrom, in his favorable précis of Dr. Dolphin's theory, refers to the photosensitivity induced by porphyria as "light-induced leprosy." (47) As physicians apparently continue to misdiagnose porphyria as leprosy to this day, how much more prevalent was this practice in centuries past when medicine was still in its formative stages? Once again, citing Brody: "The explanation for the frequent unreliability of medieval medical accounts is clearly the rudimentary level of medical knowledge in the Middle Ages. Physicians were unskilled and untrained, and their theories were usually faulty; they could not help but be unreliable. Medieval doctors could not properly describe leprosy because they could not tell it apart from scabies, psoriasis, eczema, and a host of other skin conditions. For instance, Charles Singer's examination of a thirteenth century description of leprosy leads him to conclude, 'Doubtless it embraces a whole series of pathological states.' The inability of medieval physicians to distinguish among diseases was common." (48) Consequently, if relatively harmless skin disorders as eczema and psoriasis could be construed as expressive of leprosy in former times, it is only logical to assume that porphyria was viewed no differently.

When therefore, then, open lesions began to appear inexplicably on a person's body in times past, it was doubtless assumed that these dermal symptoms were an expression of incipient leprosy rather than some other source. In all probability the porphyriac believed the same and was either banished from the community or shunted off to some leprosarium to spend the remaining years of his life. Ironically, the individual may have found some temporary surcease of his sufferings in such surroundings, as leprosariums were commonly dismal, dark affairs and may have inadvertently afforded some relief from the punishing rays of the sun. Unfortunately, these religious-run institutions were equally as unsanitary and inmates were allowed to socialize freely with one another. Consequently, as the result of being in close contact with active lepers on a daily basis, it would only be a matter of time before the disease was truly contracted and compounded the existing disorder of porphyria.

There were other factors as well which helped contribute to the confusion between porphyria and leprosy. Absorption or loss of nose and extremities in more extreme instances of porphyria frequently suggested the presence of leprosy. The occasional "claw-like" appearance of the porphyriac's hands also suggested this comparison. According to Brody: "Paralysis or weakening of muscles and nerves can make a (leper) unable to keep his hands and feet in normal position, causing disfigurements such as the "claw hand ..." (49) Although hypertrichosis is absent in leprosy, I believe it more reasonable to assume that, if and when this feature occurred in porphyriac sufferers of times past, they were more likely to end their days in some traveling roadshow exhibited as some freak or sport of nature than considered some werewolf. All things considered, the ultimate lot of a porphyriac in the Middle Ages was a depressing one indeed.

Interestingly, bathing in the exsanguinated blood of young children or virgins was long considered a sovereign remedy in cases of leprosy. To cite one such example: legend has it that the Roman emperor Constantine, prior to his conversion to Christianity, developed a severe case of leprosy. Ordering the sacrifice of numerous children, a potential bloodbath (both figuratively and literally) was averted at the last moment by divine intervention. Constantine was miraculously healed of his affliction and the children preserved from imminent death. (50)

Within this context I cannot help but recall Erzebet Bathory, the notorious 16th-century Hungarian countess, who purportedly bathed in the blood of her female victims. Could it be that Bathory embarked upon her sanguinary course of slaughter not in order to counteract the inexorable ravages of old age but to assuage a suspected case of leprosy? Indeed, facial sagging and wrinkling are characteristic of this disease. Perhaps the countess was familiar with the widely held belief that bathing in the blood of innocent virgins was considered an efficacious remedy in curing leprosy. Perhaps she also conceived of her affliction as some form of divine chastisement for her dissolute ways, which included sapphism and the practice of magic. (51) Certainly, Bathory would not have wanted her actual state of health to become common knowledge, as she may have feared consignment to some leprosarium and the seizure of her estates by political enemies. (52)

However, in closing, I do not wish to imply that leprosy was in anyway associated with the belief in vampires. (53) What I am suggesting is that, in reviewing the medical evidence, porphyria appears more likely to have been confused with leprosy than vampirism in ages past. Nonetheless, Dr. Dolphin is to be commended in his attempt to provide a scientific rationale for the existence of vampirism. Hopefully, with all the publicity generated by his statements made before the American Association for the Advancement of Science, others of like scientific standing will be encouraged to explore this seemingly inexplicable phenomenon in depth, as well as silence those critics who deem the field of vampirology "a pointless pursuit." (54)

1. Bruce Wallace, "Vampires Revamped," Omni, June 1979, p. 146.
2. But see Ida Macalpine and Richard Hunter, George III and the Mad Business, NY, Pantheon Books, 1969.
3. "Forum," Omni, Oct. 1979, p. 18.
4. Raymond McNally and Radu Florescu, The Essential Dracula, NY, Mayflower Books, 1979, p. 126.
5. Ian Woodward, The Werewolf Delusion, NY, Paddington Press, 1979, pp. 50-52. (Senn, in his Were-wolf and Vampire in Romania, erroneously lists this book in his bibliography as The Vampire Delusion.) See also L. Illis, "On Porphyria and the Aetiology of Werewolves," Proceedings of the Royal Society of Medicine, Jan. 1964 (and not 1969, as is erroneously given), pp. 23-26. It should be noted that Dr. Illis confuses werewolvbery with lycanthropy. The former represents the actual physical assumption of lupine traits whereas the latter is strictly delusionary. Porphyria seems more reasonable a solution when applied to the lycanthrope. However, if one believes that transformation into animals is humanly impossible, then technically all werewolves are lycanthropes.
7. Maxwell M. Wintrobe, Clinical Hematology, Philadelphia, Lea & Febiger, 1967, p. 189.
8. David Periman, "Why Vampires Hate Light and Garlic," San Francisco Chronicle, May 31, 1985.
9. Cited in Periman, ibid.
10. Ibid.
11. Philip M. Boffey, "Rare Disease Suggested as Reason for Vampires," New York Times, May 31, 1985.
12. Montague Summers, The Vampire in Europe, New Hyde Park, NY, University Books, 1961, p. 143.
13. "There is no hard evidence that heme in blood would survive passage through the stomach and small intestine, but there's no reason to suppose it wouldn't, either." Cited in "Blood Disorder Linked to Vampires Says Canadian Chemist," Canadian Press, Aug. 13, 1983.
14. Isaac Asimov, The Bloodstream, NY, Collier Books, 1961, p. 38.
15. Unless the vampire either leisurely digests his bloodmeal over a period of days like some engorged python or quickly passes any undigested blood from his system like some vampire bat. Perhaps, as mentioned previously, the vampire simply regurgitates his victim's blood and then proceeds to actually feed. Ironically, the evidence supports all three possibilities and will serve as the basis of a future article.
16. Cited in a letter from Claudia Wyckford-Jones to the Count Dracula Fan Club Newsletter, Dec. 1983, vol. 10, no. 3, p. 14.
17. A fuller excerpt of this letter reads: "Any oxygen present in the skin becomes very excited in the light and chews up skin cells causing lesions and disfigurements. Sufferers soon learn to stay in during the day and only venture out at night. Gums shrink, making the teeth look large and protruding. Hair grows on the face and hands. It also affects the personality. The sufferers develop an animal nature. Iron is very necessary for sufferers and one of the most effective ways of taking it is by drinking blood." Milgrom, cited in Wyckford-Jones, ibid.
18. The connection, nonetheless, has been made by others. But see Penelope Shuttle and Peter Redgrove, The Wise Wound: Eve's Curse and Everywoman, NY, Richard Marek, 1978, pp.238-273.
19. Cited in Summers, op. cit., p. 224.
20. Ibid., p. 232.
21. Ibid., p. 146.
22. Ibid., p. 263.
23. "It should be noted that Dracula appears in broad daylight; some have wrongly assumed that this violates vampire folklore. Actually Balkan vampire tales have the creature wandering even in the daylight, and it was Hollywood that invented the fiction that the vampire can move only at night. According to most folkloric sources, the vampire's powers are at their apex at night, however, so that may partially ac-

- count for the mix-up." McNally and Florescu, op. cit., p. 152.
24. Summers, op. cit., p. 154.
  25. Ibid., p. 155.
  26. Montague Summers, The Vampire: His Kith and Kin, New Hyde Park, NY, University Books, 1960, p. 164.
  27. Ibid.
  28. A severe outbreak of this disorder occurred in Turkey during the mid-50's after an ingestion of wheat treated with the fungicide hexachlorbenzene. But see Dean, op. cit., pp. 67-71.
  29. Harry A. Senn, Were-wolf and Vampire in Romania, Boulder, CO, East European Monographs, 1982, p. 66.
  30. "The Magyar kings also brought German settlers to Transylvania, and for the same reasons: they needed to consolidate the rule of the House of Arpad and to guard their southern border, and they also wished to exploit the colonized territories. The Germans arrived in several successive migrations. The first groups, who came in the mid-twelfth century, were apparently brought from Flanders: other, larger groups came from Luxembourg and the Moselle valley. Later the ranks of the colonists were further swelled by immigrants from the right bank of the Rhine -- Saxony, at the time -- which is probably the source of the generic name 'Saxon' for all the German colonists." Stefan Pasco, A History of Transylvania, Detroit, Wayne State University Press, 1982.
  31. Several historians, including Backman (cited below), claim these events actually took place a century later, a time at which Europe was slowly recovering from the ravages of the Black Death. Could it be, then, that the children were abducted in order to supply cheap labor to those areas recently devastated by the Great Plague? Whichever the date or reason, the children nonetheless disappeared.
  32. To further complicate matters, anthropologist Gail Kligman, in her book Beyond Dracula: Transylvanian Rituals of Life and Death (pending publication), claims that belief in vampires is not native to this country: "Werewolves, yes, living dead, yes -- but they never heard of vampires." Cited in Charles Burrell, "Dracula Legend Loses Its Bite," San Francisco Chronicle, Jan. 25, 1985.
  33. Philip Michaels, Come, Follow Me, NY, Avon Books, 1983, p. 328.
  34. For those wishing to know more about this legendary figure, I would recommend the following books: Sabine Baring-Gould, Curious Myths of the Middle Ages, New Hyde Park, NY, University Books, 1967, pp. 417-446; Eugene Louis Backman, Religious Dances in the Christian Church and in Popular Medicine, London, Allen & Unwin, 1952; and Robert Hendrickson, More Cunning Than Man: A Social History of Rats and Men, NY, Stein & Day, 1983, pp. 137-141. One might with some profit also read Robert Browning's lengthy poetic account, "The Pied Piper of Hamelin."
  35. "The souls of the deceased often appear as jack-o'-lanterns flickering about in churchyards or morasses, leading people astray in swamps and ponds, or strangling and stupefying them." Jan Machal, cited in Jan L. Perkowski, Vampires of the Slavs, Cambridge, MA, Slavica Publishers, 1976, p. 24.
  36. Unless vampires possess retractable fangs which fold underneath the roof of the mouth when not in use. This feature is common to many venomous snakes.
  37. The adjectival term "blub," according to the Oxford English Dictionary, signifies a condition that is "swollen," "puffy," or "protruding."
  38. Augustin Calmet, cited in Jan L. Perkowski, op. cit., p. 131. (Calmet also makes the intriguing comment that those who die from drunkenness are more readily found preserved in their graves, as the alcohol in their system prevents the blood from congealing in the post-mortem state.)
  39. Herbert Thurston, The Physical Phenomena of Mysticism, Chicago, Henry Regnery, 1952, p. 286.
  40. Edmund Schneeweis, in his Serbokroatische Volkskind (1961), states that the vampire is said to have "shaggy hair." Cited in Senn, op. cit., p. 67.
  41. However, some theologians maintained this transformation was never ideal, as some lupine feature was invariably lacking. Sometimes it was a paw imperfectly realized, exposing a human hand underneath. More commonly, the tail was absent. But see

Montague Summers, The Werewolf, New Hyde Park, NY, University Books, 1966, pp. 63-132, for a comprehensive discussion on the objective reality of such transformations.

42. However, the article entitled "America's Hidden Monsters" suggests otherwise.
43. Dr. Karl Anderson, cited in "Vampire Link to Disease Denied," San Francisco Chronicle, July 3, 1985.
44. The only other mammal outside of man capable of contracting leprosy in its natural state is the armadillo. Oddly enough, this creature, a native of the New World, is shown in one of the vault scenes in Todd Browning's version of Dracula (1931).
45. Cited in Saul N. Brody, The Disease of the Soul: Leprosy in Medieval Literature, Ithaca, NY, Cornell University Press, 1974, p. 32.
46. Ibid.
47. Lionel Milgrom, "Vampires, Plants, and Crazy Kings," New Scientist, April 28, 1984, p. 13.
48. Brody, op. cit., p. 41.
49. Ibid., p. 31.
50. Ibid., p. 159.
51. "Since ancient times, leprosy has been considered an unclean disease, and its victims have long been linked to moral impurity. Tradition transmitted by copying helped perpetuate the idea of a leper as an emblem of spiritual corruption -- and the moral associations of leprosy surround the disease during the Middle Ages." Ibid., p. 51.
52. Few biographies exist in English on the life of Countess Erzebet Bathory. Only two come to mind. They are: Valentine Penrose, The Bloody Countess, London, Calder & Boyar, 1970, and Raymond T. McNally, Dracula Was a Woman, NY, McGraw-Hill, 1983.
53. Apparently leprosy was on the decline in Europe during the great vampire epidemics of the 16th and 17th centuries.
54. J. Gordon Melton, "Books, News and Reviews," FATE, May 1984, p. 112.



FIGURE 7. Lepromatous leprosy with severe nerve involvement. Same patient as Fig. 3. Note contracture of all digits ("claw" hand) and external rotation of thumb ("simian" hand), with atrophy of thenar and hypothenar eminences.

San Francisco Chronicle (5/31/85):

"Why Vampires Hate Light and Garlic" (by David Perlman)

LOS ANGELES. Those evil, blood-sucking creatures famed as vampires in legend and film were actually suffering from a rare hereditary disease, a Canadian chemist proposed here yesterday.

The same disease, he said, can also account for werewolves, who according to myth also seek their human prey on moonless nights and must hide by day.

Dr. David Dolphin of the University of British Columbia began investigating a lethal group of blood diseases called porphyrias 15 years ago as a young researcher at Harvard. The chemistry of the complex problem has been his major interest ever since.

He described his research in both science and folklore yesterday at a symposium on "chemically solvable problems" during the annual meeting of the American Association for the Advancement of Science.

Vampires are best known from Bram Stoker's 1897 novel "Dracula," and from the 1931 movie starring Bela Lugosi that still plays on late-night television.

However, in the rural wilds of Romania and Hungary vampire stories still abound, Dolphin said. Vampires inhabit the restless souls of heretic, criminals and suicides, according to legend. They must drink blood -- preferably the blood of virginal young women -- and they must return to their graves before each dawn.

A crucifix will ward off vampires, and sleeping with a wreath of garlic around the neck is effective night-time protection.

Werewolves are different. They are humans who turn into wolves at night and return to human form by day.

Many of the legendary attributes of vampires and werewolves are strikingly similar to the most severe forms of the porphyrias, Dolphin noted. He suggested that his study of the diseases offers the first scientific explanation of the myths.

The porphyrias are caused by a genetic defect that ultimately destroys the ability of the body to produce a compound called heme -- the red pigment in blood cells that contains iron and transports vital oxygen to every organ and tissue.

The most severe clinical symptoms of the porphyrias can be ghastly indeed: extreme sensitivity to sunshine and almost any other light, leading to scarring and mutilation of the face; loss of tissue around the mouth, nose and eyes; deformed fingers and toes that begin to look like claws, and teeth that become stained brown or blood-red and appear like fangs protruding from taut lips and gums.

Excess hair can be another symptom, and victims of the final stages of the disease may suffer from raging mania and seizures similar to severe epilepsy.

"Imagine, if you will, the manner in which an individual in the Middle Ages would have been received if he only went out at night and when he was seen he would have an animal look about him -- being hairy, large of tooth and badly disfigured. It seems more likely that such people might well have been considered werewolves," Dolphin

said.

Although the porphyrias are extremely rare and the most severe cases are even rarer, about one person in 200,000 carries the gene for the diseases, Dolphin said. Some of the forms can be caused by extreme stress or alcohol, he noted, and many end in insanity.

Porphyrias also can be linked to the vampire phenomenon, Dolphin suggested, because victims would have a strong need for heme, which is found in blood.

"A major clinical treatment for some porphyrias is an injection of heme," Dolphin said. "And since in the Middle Ages an injection of the red pigment of blood would not be possible, what else might take its place? It is our contention that blood-drinking vampires were in fact victims of porphyria trying to alleviate the symptoms of their dreadful disease. The folklore concerning the nocturnal behavior of vampires would, of course, be consistent with their photosensitivity."

As for garlic, Dolphin said, the principal constituent of the potent bulb is a chemical called dialkyl disulfide, which closely resembles other drugs and chemicals that destroy heme.

#### News Bulletin #2

#### San Francisco Chronicle (7/3/85):

##### "Vampire Link to Disease Denied"

NEW YORK. A theory that vampires of folklore were victims of a rare inherited illness has been disputed by a group representing people with related forms of the disease.

"As far as patients are concerned, this is just exploitation," said Desiree Dodson, director of the American Porphyria Foundation in Montgomery, Ala. She said there is no evidence to link the inherited disease called porphyria to vampires.

The vampire theory was presented in May by David Dolphin, a chemist, to the American Association for the Advancement of Science. Dolphin, a professor at the University of British Columbia, said that one rare form of porphyria can cause disfigurement, sensitivity to sunlight and garlic, and a shortage of a certain component of blood -- characteristics attributed in legend to vampires.

Dr. Karl Anderson of New York Medical College in Valhalla, who has treated many people with porphyria, said the rare disease called congenital erythropoietic porphyria could not have given rise to vampire stories because no one in the Middle Ages knew that its victims had a blood deficiency. The victims do not develop a thirst for blood.

Anderson said 5000 Americans may suffer from porphyria, of which there are about six types. The form discussed by Dolphin has been seen in only 60 people, Anderson said.

Dolphin, asked about Dodson's criticism, said, "It's very sad that these people suffer from this disease, but that certainly shouldn't stop a discussion on this subject."

Examiner (8/20/85):

"U.S. Docs Discover Werewolf Children" (by Gus Vandermeer)

American doctors are examining the baffling case of two young boys who are virtually turning into werewolves.

The faces of the pathetic youngsters are covered with hair and their gums are pulled away to expose their teeth, giving them the ferocious appearance of human wolves.

The EXAMINER has learned exclusively that Dr. Marco Antonio Flores plans to bring Jesus Aceves, 10, and his cousin Gabriel Gomez, eight, to Dallas, Texas, from their home in Loreto, Mexico.

It is his hope that American specialists will be able to reverse the effects of the rare disease before the boys become full-fledged werewolves and their lives are ruined forever, according to a freelance journalist covering the amazing case for the EXAMINER.

The cousins were kept hidden for years by their anguished parents until the condition grew so alarming that they sought out Dr. Flores.

He believes that their malady is one of six types of porphyria, an inherited disease characterized by a deficiency of a red pigment in blood cells known as heme.

"Because the victims exhibit excessive hair growth and receding gums which expose the teeth, researchers are convinced the disease in ancient times was the basis for werewolf and vampire legends," explains Dr. Flores.

"The malady is further aggravated by sunlight, causing the victim to avoid daylight and become a night person."

While modern medicine has been successful in treating the disease, says the doctor, "in ancient times the only other alternative was to drink a lot of human blood."

Dr. Oswald Ebon, a medical researcher at the University of Texas, explains that porphyria is caused by a defective gene.

"Some of its victims grow facial and body hair and, because they are sensitive to light, go outdoors only at night," he adds.

The most serious form of the disease is acute intermittent porphyria, or AIP, says Dr. Zbyslaw Petryka of the University of Minnesota.

"An AIP victim may have an attack every few months or years," he says.

"Attacks are accompanied by abdominal pain, vomiting, breathing problems and sometimes paralysis.

"The stomach pains and nervousness brought on by an attack of AIP are often misinterpreted as a form of insanity."

Misdiagnosis of the malady is common. As yet there is no cure for the ghastly disease, which, however, can be controlled with treatment.

Dr. Petryka, along with Dr. Claus Pierach, also of the University of Minnesota, helped perfect the treatment, which involves infusions of hematin, a compound related to elements in the blood.

The University of Minnesota is the only place in the world where the precious hematin is produced.

#### News Bulletin #4

#### Examiner (9/3/85):

##### "America's Hidden Monsters" (by Gus Vandermeer)

America's vampires and werewolves are flocking to a secret clinic in the Rocky Mountains to rid themselves of the curse that makes them kill for blood.

Dr. Roland Mireascu, the founder of the clinic, reveals that he, like his patients, is on the run because many of them have become murderers to satisfy their blood-lust.

"So you see, we cannot afford to disclose the location of the clinic," he told a European freelance journalist.

"But we must spread the word -- there is a cure for vampirism for victims who want to be free of their terrible burden."

The 68-year-old physician and exorcist, who fled his native Rumania when a similar clinic was in danger of being exposed to the authorities, insists that vampires and werewolves should not be considered common killers.

"Suspected murderers plead insanity as a matter of course," he explains.

"Vampires and werewolves are not insane -- they are the victims of an inherited disease called porphyria."

Dr. Mireascu believes that he has found a way to cure the affliction that prevents the body from properly making heme, an iron pigment that gives blood its red color.

David Dolphin, a biochemist in Vancouver, Canada, contends that vampires and werewolves may be porphyria victims who suck the blood of others to get the precious iron pigment.

Victims also react adversely to a chemical in garlic, which folklore holds to be an effective deterrent to the monsters.

And the skin of those suffering from porphyria is also very sensitive to sunlight, so they may very well shun sunlight, just as vampires and werewolves do.

But there is more to curing vampirism than mere blood treatments, adds Dr. Mireascu. He believes that astral beings take over the human bodies in order to delay being judged for their evil deeds.

"These beings may in fact cause porphyria, causing their victims to suck the blood of others -- and so delay their own day of judgment."

In addition to eliminating the physical causes of vampirism, Dr. Mireascu also treats the underlying spiritual causes by exorcising his patients.

He estimates that there may be hundreds of vampires and werewolves in the U.S. who would gladly undergo treatment -- if only they knew of his clinic.

#### News Bulletin #5

##### Weekly World News (9/10/85):

###### "The Lost Village of the Wolf Kids"

An incredible race of wolf people has been discovered in an isolated pueblo in Mexico -- and stunned scientists are clamoring to study the bizarre creatures.

The strange race appear to be human in every way except that their bodies -- including their faces -- are totally covered with dark, curly hair.

Experts are unable to explain exactly how the wolf people came to be, but theories of their origin include the possibility that they are the offspring of extraterrestrial beings!

"There are 16 of them in all -- 15 boys and girls and one adult," said Consuelo Flores, a woman from Nuevo Laredo, Mexico, who has had close contact with the hairy creatures. "They live in the village of Loreto in Zacatecas state. They are all descended from one person -- an old woman by the name of Maria Luisa Diaz. The children are unusually intelligent, but not much is known about them. The wolf people are poor peasants and they want no publicity."

Scientists have studied the hairy youngsters, and a number have concluded that their condition is inherited. Not all the children in wolf-people families are born with the condition, but even those who appear normal may produce hairy children in the next generation.

Others who have seen the wolf children believe they may actually be a new race fathered by beings from another planet.

This theory is supported by the fact that Maria Luisa Diaz knows nothing of her origins.

#### News Bulletin #6

##### Examiner (9/10/85):

###### "Curse of the Wolf" (by Frank Kendal)

For 80 years they hid their horrifying secret.

But now stunned medical researchers are flocking to assist the family that terrify-

ing turn into werewolves.

They have discovered that the affliction has struck girls as well as boys -- and many more than was revealed recently in an exclusive story in the *EXAMINER*.

Shockingly, the faces of all the pathetic victims are covered with dense hair and their shrunken gums leave their teeth bared, giving them the appearance of ferocious human wolves.

The family now lives in the remote village of Loreto, Zacatecas, Mexico.

And their plight would have remained undiscovered to this day if the mother of one of the afflicted children, in sheer desperation, had not taken him to be examined by Dr. Marco Antonio Macias Flores.

"The entire family is afflicted," said the doctor, who carried out tests at the Autonomous University of Zacatecas and is planning to treat the child and other members of the family in the United States.

The boy, Jesus Fajardo Aceves, 10, and his cousin Gabriel Gomez, 8, were kept hidden for years by their anguished parents until their conditions grew so alarming that their parents felt compelled to seek help.

"I have never seen anything like it before," said Dr. Flores. "Fourteen females and seven males have sprouted unsightly hair -- but even normal-looking members of the family carry the mutant genes. And the terrible thing is that they will pass the trait on to their offspring."

Members of the family have tried to hide the terrible, disfiguring secret since 1905 when Maria Luisa Diaz became the first mutant child to be born with extra facial hair.

Since then, they have successfully managed to avoid discovery by moving frequently -- and keeping the worst afflicted children hidden indoors.

But Mrs. Maria de Jesus Fajardo Aceves, who first sought treatment for her son in Laredo, Texas, said: "I am tired of hiding. I just want my children to live a normal life."

Dr. Flores believes that the malady that afflicts the children is one of six types of porphyria, an inherited disease characterized by a deficiency of red pigment in the blood cells, known as heme.

Because the victims exhibit excessive hair growth and receding gums, researchers are convinced the disease was traditionally the basis for werewolf and vampire legends.

"The malady is further aggravated by sunlight, causing the victim to avoid daylight and become a night person," said Dr. Flores.

And, while modern medicine has been successful in alleviating the disease -- although not curing it -- the only alternative in ancient times was to drink human blood.

Sun (9/3/85):

"Vampires Hire Publicity Firm"

Vampires who want to take the bite out of their bloody reputation have hired a public relations firm.

"We want to be known for what we are, innocent victims of a rare, hereditary disease rather than the monsters we have been mistaken for throughout history," says Ron de la Voturie, president of the International Porphyria Society (IPS).

Engaged to fight the negative image vampires have acquired over the centuries is Stephanie Stevens, a partner of the New York firm of Huspens, DeMarco and Upior.

"It's time these horrid myths were laid to rest," Stephanie insists.

While acknowledging her clients were born with a condition that makes their blood weaker than the average person, she vehemently denies this makes them develop a thirst for human blood.

"These poor people have been submitted to slander, even torture, through the ages, through no fault of their own.

"Folklore has it vampires can be killed only if an oaken stake is driven into their hearts during the light of the day. What a silly notion!

"Of course they can. And so can anybody else!"

The disease afflicting vampires is medically known as congenital erythropoietic porphyria, a rare form of blood deficiency thought to afflict 5,000 Americans.

While some forms of the disease require periodic transfusions of blood, Stephanie denies members of IPS stalk do-it-yourself transfusions in dark alleys.

"Blood introduced into the digestive system through the mouth doesn't travel into the circulatory system as blood," she points out.

"Blood must pass from body to body, directly into veins and arteries."

She is especially upset over a paper presented at a spring meeting of the American Association for the Advancement of Science in Los Angeles.

"A Canadian scientist alleged one form of porphyria can cause disfigurement of the teeth, extreme sensitivity to sunlight and garlic, and a lust for the blood of other people, legendary characteristics of the classic vampire.

"This was a particularly horrid example of misinformation," she says.

(Editor's note: From this article it appears that those who suffer from porphyria are of two minds when it comes to Dr. Dolphin's theory. On one hand, they resent being termed vampires, yet at the same time they appear to be trading on vampirism's notoriety to promote a greater public understanding of their disorder. No doubt my belief that porphyria was actually confused with leprosy in times past will be even less favorably received than Dr. Dolphin's suggestion. No market value, I suppose.)

News Bulletin #8

World Weekly News (9/24/85):

"Baby in the Dark! Tragic Tot is Allergic to Light!"

Katy Green blew out the single lighted candle on her birthday cake and in so doing plunged herself back into the darkness she must live in because she's allergic to light!

The tragic tot's doctors have ordered her mom to protect the child from all but the dimmest indirect light.

But Sonya Green couldn't cope with the idea of her daughter celebrating her first birthday without a candle. So she struck a match to it and for a few heart-warming seconds -- they shared the miracle of light.

Katy is sensitive to light that even a minute's exposure to the flickering little flame would have mader her physically ill.

Longer than that and her skin actually would have begun to age and even scar.

"Doctors have told me that Katy's fingers and toes could literally shrivel up if she goes into the light," said Mrs. Green, of Saltney, England.

"But I was determined she would have a birthday candle, if only for a few seconds. Soon even that may be too much for her to bear."

The fact is, toddling Katy's condition is getting worse and there's not a thing medical science can do about it.

The malady is incredibly rare.

And while there's one medicine on the market to help relieve the pain and symptoms she suffers when hit by light. It's not a cure.

Mrs. Green said the family's home is outfitted with thick curtains and blinds to keep out the light. Katy's frequent trips to the hospital for checkups are also made in darkness, in the back of a special light-tight van.

The little girl's plight has not gone unnoticed in Britain. Bighearted souls have donated more than \$7,000 to help offset her medical bills.

And a manufacturer is working to develop a special solar film that could be applied to the windows and would allow Katy to see out, but not let light in.

Despite the hardships, the Greens keep their chins up and do the best they can. "The everyday problems are difficult," said Mrs. Green. "But we have learned to live with it as best we can.

"We simply take each day as it comes."

(Editor's note: Could this rare "malady" be a form of photosensitivity induced by porphyria?)

News Bulletin #9

Weekly World News (11/26/85):

"Vampires Linked to AIDS (by Terry Connors)

European researchers have concluded in a shocking new study that vampires were AIDS carriers -- and gay!

In a lengthy scientific article that's to be published next spring, East German Drs. Bremen Fischer and Hofman Piehl contend that vampires were feared, hated and killed because they spread the disease, to which they were immune, among the population at large.

They further claim vampires didn't bite or suck the blood of victims but spread the AIDS virus through sexual and possibly even casual contact.

Austrian virologist Karl Sauberer, an AIDS expert with a lifelong interest in vampirism, called the Germans' study a bombshell with "staggering implications for historians, and AIDS researchers, working today."

Legend has it that vampires rose from the dead at night to suck the blood of victims, and they could only be killed with a silver dagger through the heart.

And while there's never been much evidence to prove it, most modern experts believe vampires were merely ordinary men who drank the blood of healthy humans to make up for deficiencies in their own.

Medical literature from the Middle Ages notes that people who were thought to have been bitten by vampires lost weight rapidly and without reason, experienced profound and persistent fatigue, endured high fevers and drenching night sweats and bruised easily.

Researchers today have determined that those same symptoms almost always signal the onset of killer AIDS.

"If we accept the idea that vampires were AIDS carriers, then the connection to homosexuality is inevitable," said Sauberer.

"As we all know, homosexuals are at great risk of contracting AIDS.

"And there is, after all, a vast body of centuries-old literature that shows vampires by far preferred the company of men."

The most famous vampire of them all -- Count Dracula -- is widely believed to have been shockingly promiscuous and bisexual at the very least.

"I subscribe to that belief and there is no one who could convince me otherwise," said Sauberer.

"The suggestion is there for anyone who wishes to do the research."

The Germans say, but Sauberer does not necessarily agree, that Middle Ages AIDS victims mistook the purplish lesions caused by Kaposi's sarcoma, a cancer that strikes virtually all AIDS victims, for the bite marks of vampires.

They also theorized that AIDS vanished -- along with vampires -- due to a mutation of the virus.

If that is true, said Sauberer, it could mean that the virus is forever mutating and has appeared and disappeared throughout history.

"From the viewpoint of the historian, you might say that vampires terrorized peasants in the Middle Ages just as AIDS victims are terrorizing everybody today," said Sauberer.

"If nothing else, it's a fascinating parallel."

(Editor's note: And just when I thought it was safe to relax my vigilance ... Any comments on this latest theory from my readership?)

### Corrections

1. Page 4, line 37: read "as" for "has."
2. Page 6, line 48: read "confident" for "confidant."
3. Page 8, line 17: read "there" for "theire."
4. Page 11, line 7: read "some" for "som."
5. Page 14, line 19: read "tradition" for "tradtion."
6. Page 17, line 7: read "away" for "awy."
7. Page 19, line 24: read "condition is" for "conditionis."
8. Page 22, line 13: read "made" for "mader."



Fig. 1. Turkish boy with cutaneous porphyria, photographed in winter of 1960 during a period of clinical remission. Note facial hirsutism and hyperpigmentation. (Courtesy of Dr Joe Wray, Hacettepe Children's Hospital, Ankara, Turkey.)

