Some Historical Milestones:

The concept of mental illness as related to physical disease can be readily traced as far back as the great Hippocrates of Cos, the father of medicine. Hippocrates in a sense implicated a hematogenous (blood-borne) cause, in that he noted the onset of seemingly unrelated conditions often correlated with the cessation of "madness":

"Varicose veins or hemorrhoids supervening on madness remove it"


Such a circumstance might be interpreted, in concert with the concept of focal infection (with which we shall be primarily involved in this volume), as due to a change in specificity of a causative organism and/or its derivatives (e.g. toxins). Such a change might be attributed to seasonality, and along these lines it is noted that Hippocrates had observed that both "maniacal" and epileptic states were most prominently encountered in the Spring [Hippocrates, Adams ed., 300].

Hippocrates seems to further implicate an infectious state in his description of the physical nature of "madness" and other conditions generally associated with mental illness:

"Madness, dread and fear, sleeplessness, mistakes, aimless anxieties, absent-mindedness ... These things that we suffer all come from the brain, when it ... suffers any other unnatural affection .... Madness comes from its [the brain's] moistness. When the brain is abnormally moist, of necessity it moves, and when it moves neither sight nor hearing are still, but we see or hear now one thing and now another, and the tongue speaks in accordance with the things seen and heard on any occasion. But all the time the brain is still a man is intelligent." [Jones 1923, Vol. 2, Ch. XVII, p. 175; Adams, 347, 358].

Such talk of "moistness" in the brain may seem a bit nonsensical at first, and the writer confesses his own lack of "hands-on". However, deferring to the eloquent Martin H. Fischer, M.D. (Professor of Physiology, U. of Cinn., swelling through uptake of water is common in infected conditions (Death and Dentistry, 1940), so there is some "modern" conceptual agreement. The major point to be emphasized is that Hippocrates regarded all types of abnormal" conditions to be the result of normal disease processes, and further that the blood played an important role in their dissemination:

"The progress of the blood through the body proving irregular, all kinds of irregularities occur." [Jones 1923, II, 249]

Let us now jump forward a couple of millennia to the well-known works of Benjamin Rush, a signer of the Declaration of Independence and Philadelphia's foremost physician in the early 19th Century. Certainly, others had earlier associated diseased teeth with various systemic conditions, as Benjamin Rush himself had offered that his observations merely reflected the views of many of his contemporaries. But it was Rush's work that particularly sparked widespread modern era consideration of this important principle. While Rush's reputation in this regard was gained through the cure of
a number of cases of rheumatism by removing infected teeth, he had also specifically implicated the teeth as "unsuspected causes ... particularly of nervous diseases." (Rush, 1818)

Midway in time between Rush and the present, Upson in 1908 exhaustively documented dental disease as a cause of mental illness. He described a number of case studies wherein a cure of often-longstanding mental illness was effected through the correction of dental problems -- including disease (e.g. caries), abscessed or impacted teeth, and delayed eruption of permanent teeth. This was followed in 1919 by Cotton, who emphasized the etiologic role of infected teeth in many cases of mental illness, referring to the prior works of Upson in 1908 (and even earlier work by Savage in 1876). Upson's work preceded the main works of Frank Billings on focal infection, whereas Cotton prominently cited Frank Billings.

Most of E.C. Rosenow's work with a direct bearing on mental illness came in the middle years of the Twentieth Century. Simply stated, it may be offered that Rosenow proved bacteriologically what Upson and Cotton, and others, had so aptly described clinically. Rosenow established beyond all doubt and for all time that mental illness, and the closelyrelated condition known as epilepsy) is secondary to oral focal infection, primarily diseased teeth (yes, caries, root-canals, etc.). Beyond this, he developed autogenous vaccines which reportedly worked miracles. "Recipes" for Rosenow's vaccines are posted at InstituteOfScience.com, "ROSENOW".

We shall only briefly touch here on the grand follow-up works of E.C. Rosenow on the subject of mental illness -- this primarily in the context of commentaries on some of the relevant historical and contemporary literature. For further reading, the best source would be Rosenow's articles themselves, as cited in Sidebar #1.

Sidebar#1: E.C. Rosenow Articles Specifically on Mental Illness
---Bacteriologic, etiologic, and serologic studies in epilepsy and schizophrenia, I. Postgrad. Med. 2: 346-357, Nov. 1947
---Bacteriologic, etiologic, and serologic studies in epilepsy and schizophrenia, II; effects in animals following inoculation of alpha streptococci, Postgrad. Med. 124-136, Feb. 1948
---Bacteriologic, etiologic, and serologic studies in epilepsy and schizophrenia, III; cutaneous reactions to intradermal injection of streptococcal antibody and antigen, Postgrad. Med. 3: 367-376, May 1948.
---Bacteriological studies in idiopathic epilepsy and schizophrenia, South Dakota J. Med. and Pharm. 5: 243-248; 262; 272, Sept. 1952.
---Bacteriological studies on etiology and chlorpromazine treatment


Not long after Rosenow's passing (7 March 1966), Störtbecker in 1967 reported "Confirmation of the Rosenow antibody-antigen skin reaction in idiopathic epilepsy [and] "an encouraging regression of clinical and electro-encephalographic signs and symptoms ... observed in [epilepsy] patients, following removal of dental foci ...". Störtbecker's position was wholly in agreement with that of Upson, Cotton, Rosenow, et. al., advocating the removal of infectious foci as a means of reducing the toll of mental illness and other neurological afflictions.

Also in the 1960s, the incomparable Linus Pauling approached the problem from the chemical perspective, within the context of his studies on Vitamin C. In his 1968 book on the subject, Pauling noted how mental disease is "usually associated with physical disease", and what this means chemically. Pauling discussed how vitamin deficiencies, which chemically appeared to cause mental illness, may be the result of bacterial or other types of infestation; the large requirements of the invaders for these essential nutrients result in deprivation of the host. In such cases, massive supplements may make up for the deficient states and compensate chemically, thus averting deficiency-induced mental illness. (See Pauling 1968, pp. 265-269).

Such a position is in accord with the works of Upson, Cotton and Rosenow, etc., but nonetheless it would appear that the vitamin supplementation route is merely treating symptoms caused by a bacterial infection. Such being the case, the most logical approach would also and in the first instance involve eradication of the source of bacterial infection.

Moving into the 1990s, we find specific discussion of dental disease as causing mental disease in McCall 1991, reporting on 4 cases in which preexisting psychiatric disorder was exacerbated by acute dental pain. McCall provides profiles of some very early articles which had identified dental disease as the cause of psychiatric and other nervous system disease, including Mummery 1880, Dickinson 1890, and Van Doorn 1909 (McCall, WV, Psychosomatics 32, Winter 1991, 114-5, "Exacerbation of Mental Illness by Dental Disease").

However, for the most part contemporary studies involving correlations between dental and mental diseases tend to assume that the mental condition causes dental neglect, and do not generally consider that the oral foci may actually be the cause of the mental
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illness. (See MEDLINE, searching keyword combinations, e.g. "dentistry mental illness", etc.). For example, Hede, B., Community Dentistry and Oral Epidemiology 1995 Feb., 23(1):44-8, notes the relatively poor oral health status of hospitalized mental patients, compared to the local general population, concluding that mental condition is responsible for the dental.

In a similar vein, Stiefel DJ, et. al., Special Care in Dentistry 1990 Jan-Feb, 10 (1):6-12, noted that severe dental disease has been reported for patients receiving psychiatric treatment, and found significant increases in risk factors and increased oral pathosis in non-institutionalized persons with mental illness compared with a control group from the same community.

Genetics & Biochemistry in Relation to Mental Illness

A number of articles in modern times have pointed out the insufficiency of genetic factors alone to cause mental illness. Crow, in 1987, p. 756, cited 4 difficulties with the hypothesis that genetic factors are sufficient determinants:

1. "lack of a simple model of transmission",
2. "high prevalence in spite of a fertility disadvantage"
3. "explaining age of onset"
4. "accounting for the episodic nature of the disease. . . ."

Crow offers that "refuge from these difficulties is often sought in various gene-environment interaction hypotheses." Further, Crow acknowledges that schizophrenia and manic depression may be merely different manifestations of the same underlying condition. Mention is also made of the seasonality of mental illness (as had been discussed much earlier by Hippocrates).

All of this seems consistent with the positions and proofs, resp. of Upson, Cotton, Rosenow, etc., i.e., that mental illness is caused by hematogenous (blood-borne) infection emanating from oral foci (primarily teeth).

Crowley in 1987, p. 821, further boosted the case for some non-genetic, environmental (e.g. bacteriological) cause of mental illness, with the observation that despite reduced fertility of affected persons, there is a relatively constant prevalence of psychosis in the various populations of the world.

Likewise, an editorial in Nature, 1988, p. 95-6, asserted that "Schizophrenia is arguably the worst disease affecting mankind", and called for the "definition of non-genetic factors that may influence the development of disease." This position reflected that of Lauder 1988, p. 105, who explicitly discussed the possibility of physical infection. Lauder, 1988, P. 105, noting a small degree (10%) of familial clustering, offered that this is "not synonymous with genetic inheritance." Rather, Lauder offered, a common environmental cause "such as slow viruses" may be implicated.

Leff, J, 1991, p. 694, noted that "... a series of W.H.O studies has revealed that the outcome of schizophrenia is decidedly better in developing countries, despite scant follow-up treatment, than in the West." On the surface this might serve as a pro-genetics argument; alternatively, one might suggest the situation will even out as westernized diets and dentistry gain a wider footholds in such areas.
On the biochemical front, Daniel Koshland, respected biochemist at U.C. Berkeley and former editor of Science magazine, has acknowledged that "some problems of mental illness are caused by malfunctioning biochemistry and ... these probably cannot be helped by counseling alone." On the contrary, the definite linking of schizophrenia to malfunctioning biochemistry supports an hypothesis that success of counseling is attributable, at least in part, to the power of the mind to work wonders, including overcoming disease; in contrast to the more common interpretation that the success of counseling means that mental illness itself is psychogenic. But beyond such an implication, as far as the real world cause of mental illness, Koshland offers little.

Meanwhile, despite rather conclusive evidence and even general agreement that genetics is only part of the problem, the search goes on for a gene that causes mental illness -- probably because that's where the research dollars are at the present time.

Peltonen, L., Nature 378 (14 Dec. 1995), 665-6, discussed "firm evidence for one important [genetic] locus that, when perturbed in some way, predisposes carriers to the disease." Peltonen refers to "the large international effort now underway [to identify] ... one of the genes that cripples the lives of millions of people and their families. ... Although it will be a long way from there to conceivable therapies, finding the genes predisposing to schizophrenia is an essential first step in formulating new treatments for the disease."

Wrong!! Peltonen is "warm" in one area -- needing only to change one letter in the word "locus" to read "focus", as it has already been proven that the oral focus is the cause."

All in all, the modern, authoritative medical position on this subject seems best summed up by Byerley, WF, Nature 340 (3 Aug. 1989), 340-1 "... additional work is needed before firm conclusions can be made."

Non-Conventional Behavioral and Oral Focal Infections

It must be recognized that when discussing mental illness we may also be touching on other conditions not generally and/or typically identified as such. One such extreme case involves the issue of potentially violent mentally ill persons. Koshland in 1992 (Science 255, 777) called for an "increase [in] the amount of research into mental illness so that in the future we can separate those who are likely to pose great danger to others from those who only pose dangers to themselves." It is noted that E.C. Rosenow already conducted breakthrough work in this area back in 1951. In an influenza-related bacteriological study involving a prison population, it was accidently discovered that bacteria taken from compulsively violent offenders presented a unique "neurotrophic" profile correlating with the violent behavior (See Rosenow, E.C. and Rosenow, O.F., "Influence of streptococcal infections on compulsive behavior of criminals", Postgrad. Med. 10: 423-432, Nov. 1951). This work might properly be considered within the context of recent demonstrations of characteristic and possibly genetic brain pathology
in sexual offenders (e.g. in R. Langevin, Clarke Institute of Psychiatry, "Brain Damage in Sexually Aggressive and Pedophilic Offenders (AAAS Annual Meeting, 1989).

In the case of drug addiction, Self, D.W., Nature **378** (14 Dec. 1995), 666-7, asserted that "Drug abuse can be viewed as a mental disease, one that is characterized by neurobiological disturbances and behavioural abnormalities such as compulsive drug taking and intense drug craving." Self referred to Carrera et. al. on p. 727 of this same issue, which reported "the first successful demonstration of active immunization against the psychoactive effects of cocaine."

It is noted that, in the case of alcoholism, Rosenow reached the same conclusion a half-century earlier, obtaining positive skin reactions implicating a causative role for streptococcal infection.

Segueing into a sure-to-be controversial area, it is noted that Hippocrates had stated "Homosexuality ... is no more or less divine than other disease." [Jones 1923, 1, 127, XXII]. Such an hypothesis finds a measure of support in the recent scientific literature. According to C. Holden, *Science* **268** (16 June 1995), 1571, modern studies confirm that male homosexuality is only about 50% heritable; as a result, psychologist Michael Bailey has asserted "we need to start looking for environmental mechanisms", which he suspects will be primarily biological.

Insofar as many "mysterious" (genetically pre-disposed) diseases are caused by some phase of a blood-borne infection emanating from oral foci, including mental illnesses as shown by Upson, Cotton, Rosenow, et. al., might this indeed also be a factor in the case of a number of behavioral conditions such as those mentioned above? In these as in other entities not generally thought of as the result of infectious disease, such an hypothesis of oral focal infection is readily testable through use of skin tests described by Rosenow in the above-mentioned *Postgrad. Med.* article and elsewhere. Beyond this, assuming positive results of testing, the means of specific treatment for these conditions is at hand -- a combination of vaccine-therapy and removal of implicated oral foci.

**Oral Foci and Insane Elephants**

Finally, it must be noted that the problem of oral foci and mental illness appears to be one we share with our elephantine cousins. *Science* magazine [Holden C., 265, 1529 (9 Sept. 1994)] noted that after a rampaging circus elephant was killed in Honolulu in August, an autopsy was conducted "to see if there was a biological cause for her aberrant behavior. They found no sign of disease -- but it was incidentally mentioned, without further discussion, that the elephant had previously suffered a tusk abscess."

There you have it! If diseased teeth are etiologically linked to mental illness, why not tusks and elephants? On this same theme, a *Los Angeles Times* article (Sahagun, L, 10-11-94, A1) notes that elephant uprisings have been on the rise in recent years, with some interviewees speculating that as a group they may just be unhappy
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over their confinement and lack of adequate exercise. Maybe their teeth and tusks aren't getting the proper exercise required to stay healthy and infection-free. And how about their diet of institutional food? Perhaps this is contributing to tusk decay and this in turn is a factor in increased incidence of mental illness in elephants. Or maybe they just don't like the food.

**Therapy for Mental Illness**

As discussed above, the most important thing to do to provide relief from this condition is to remove or otherwise fully cure any possible oral foci -- diseased teeth, gums, jawbones, and, if still infected, tonsils. All the way through the process, from intake to cure and total recovery, the very best associated medicine would be Rosenow's vaccines (including autogenous antigen and/or antibody). See InstituteOfScience.com/vaccines.html", for essential details of vaccine recipes; and E.C. Rosenow (1875-1966) & Associates, A Reference Manual - "Medical Guide of the Future" for further discussions.

But if no one (i.e. until someone) is making Rosenow's vaccines, autohemotherapy would appear to be a desirable and readily available option. In its predominant traditional form, i.e., intramuscular reinjection of one's own freshly drawn blood, autohemotherapy has reportedly been successfully used for a wide range of diseases over the years, including mental illness. A full listing of nearly a thousand articles on the subject, along with consideration of the historical context from bloodletting to bone-marrow transplantation, is available from the INSTITUTE OF SCIENCE in the Autohemotherapy Reference Manual; see Autohemotherapy.com for more information.

It is noted that between 1927 and 1939 some 19 articles on autohemotherapy for mental illness were listed in the INDEX MEDICUS. These have been grouped by mental condition as listed in their titles, and listed in **Sidebar #2**.

The procedure is very simple: Up to 10 cc of blood is taken from a vein in the arm and injected deep (1.5 inches) into the buttox muscle; injections were commonly given weekly or bi-weekly as needed. Smaller quantities, e.g. 5cc, are used for children.

Alternatively, smaller amounts, e.g. 2-3cc, are injected in to a shoulder muscle. Bi-weekly injections are common, but even daily or otherwise frequent injections have been utilized without ill effect.

**Sidebar #2: Autohemotherapy for Mental Illness**

Autohemotherapy for:


--depression

---insanity and epilepsy: in epileptics and insane, [M. Mitlin & E. Posdniakov] Vrach.dielo 10: 502-504, April 15, 27
---mental Illness/psychoses:
  ---in mental diseases,[E. Zara] Riforma med. 47:330-5, '31
  ---in mental diseases, [P. Durando] Osp.maggiore 21: 209-213, April '33
  ---autogenous, autohemotherapy in psychiatry, [Beelitz Med.Welt 7:1330, Sept.16, '33
  ---Reddick, R.H., Autohemotherapy in psychiatry, Maryland M. J. 4:22-31, Jan. 1955
---schizophrenia
  ---in schizophrenia, [O. Freytag] Psychiat.-neurol.Wchnschr. 35: 322, July, '33; comment by Magenau 35: 468, Sept.23, '33
  ---autohemotherapy in schizophrenia. [P. G. Quirós] Arch.de neurobiol. 313: 931-936, July-Dec. '33
  ---autohemotherapy in schizophrenia [S. Cagilero] Studium 26: 73-76 April 1, '36

Autohemotherapy for mental illness, combined with:
---fever therapy: Meco, O., "Autoemopiretoterapia associate; rapporto preliminare della casistica e preliminari considerazioni."
---water (autoblood hemolysed in water): autogenous, autohemotherapy in mental diseases; advantages or use of hemolysed blood in distilled water; cases, [P. Tenconi] Note e riv.di psichiat. 66: 449-470, Oct._Dec., '37

Autohemotherapy, other:
Drugs

As is well known, at the present time drug "therapy" is the predominant form of treatment for mental illness. That this is not the end solution, or even close, is immediately evident from reading the labels of the likes of popular drugs of the 1990s -- Cogentin, Depakote, Haldol, Ativan, Risperdal. Adverse reactions of all of them read like a catalog of symptoms of mental illness. A simple explanation for the primary difficulty with this approach may be found in the works of Rosenow on Thorazine (chlorpromazine).

Rosenow showed that Thorazine causes a worsening of the underlying bacteriological condition causing mental illness in the first instance. Independent findings as early as 1963 of severe liver damage in some patients taking thorazine (McManus p. 78) may provide substantiation of such worsening of the bacteriological condition.

Rosenow's work in this area might similarly explain and substantiate the association of drugs such as Prozac with acts of violence; perhaps some of these drugs also cause a worsening of the bacteriological condition. In the case of thorazine, the patient is apparently rendered "harmless" via a virtual (chemical) lobotomy. It is suggested that other "therapeutic" drugs be assessed using the methods of Rosenow, in order to determine their bacteriological effects.

In any case, in view of their known dangers and the existence of attractive options, the continued use of such drugs is anything but scientific. Let us rather remove the oral nests of infection that are causing and perpetuating mental illness; initiate production and use of the far more desirable, very specific, and harmless vaccines of Rosenow; and in the meantime immediately employ autohemotherapy as a safe and accessible therapy of first resort in this and other afflictions known to be caused by hematogenous (blood-borne) pathogens or their toxins.

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