

## Anorexia Nervosa &amp; Alzheimer's

Paul T E Cusack, BScE\*

23 Park Ave, Saint John, NB, E2J 1R2, Canada.

**\*Correspondence:**

Paul T E Cusack, BScE, DULE, 23 Park Ave., Saint John, NB, E2J 1R2, Canada.

**Received:** 11 September 2021; **Accepted:** 24 October 2021**Citation:** Cusack PTE. Anorexia Nervosa & Alzheimer's. Trends Int Med. 2021; 1(2): 1-3.

## ABSTRACT

*In this paper, we consider one case of a patient with Anorexia Nervosa and Alzheimer's Disease. There may be a connection between our perception of space in the brain and AT Math.***Keywords**

Alzheimer's disease, Anorexia Nervosa, Grave's disease.

- Iron and chloride
- Low Serotonin → Memory loss

**Introduction**

In this paper we consider one female patient who has lived to be 88 and has Anorexia Nervosa (AN) and Alzheimer's Disease (AD).

I always knew the patient was very thin (skin and bones) but never realized she was Anorexic until it was hypothesized by a Registered Nurse. The patient had the following traits:

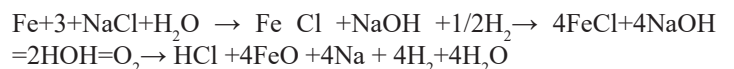
- Alzheimer's disease
- Anorexia Nervosa
- Gall Bladder removed
- Nausea; Gas; and Acid
- Partial Blindness from Glaucoma
- Grave's disease

**Psychological:**

- Father KIA in WWII when she as 10 years old (Four brothers and sisters)
- Perfectionism derived from the Nuns in her education
- Worrywart likely because of her father's premature death
- Son with schizophrenia (Sz) and low blood pressure
- Overly protective husband.

Alzheimer's can be caused by the following chemicals:

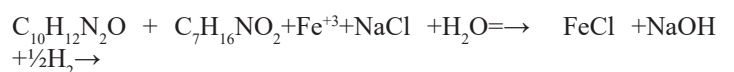
- $H_2O_2$
- Acetylcholine  $C_7H_{16}NO_2$  Glutamic → Sz
- HSV-1
- STD (Gonorrhoea) = Partial blindness



The main cause for the AN was that she was a perfectionist and a worry wart. She probably became a perfectionist from the Nun who educated her. They were very strict. The worrywart probably came from the fact that she was the oldest of 5 children who had her father KIA in WWII. As the eldest child, she said she worried that if her mother died, that she would have to look after her 4 brothers and sisters all under the age of 10. So, the cause for her AN was psychological.

The patient was well fed as a baby. I've seen photographs. However, she always ate like a bird picking away at a bit of food and covering over her plate to hide the food she did not eat. Her calorie intake was very low.

The Chemistry for AN is as follows. Note that Serotonin is involved in memory, appetite, and sexual behaviour; as well as having a neuroendocrine function. Gonane is used as an abortive. AN patients have no periods, and iron builds up in the blood. We also have three neurotransmitters involved, including Sodium, Chlorine, and Nitrous Oxide.



Serotonin + Acetylcholine → Low Blood Pressure

$C_{17}H_{28} + 3NO$   
Gonane + Neuro trans

$C_{17}H_{28} + 3NO + Fe^{+3} + 3NaCl \rightarrow FeCl_2 + Cl^- + 3Na^+ + C_{17}H_{28} + 3NO$   
Gonane (Abortion) + NeuroTR + Period Blood  $\rightarrow$  NeuroTr. +  
Neuro Trans + Ganoine + Neuro Trans

Patients with Alzheimer's Disease have trouble with space perception. What follows is the calculation from physics that show why that may be.

Brain = 1.350 kg

$M = \ln t$   
 $t = e^{1.350} = 0.3857 = 1/0.26$   
 $s = E \times t = |E|t \sin \theta$

Let  $s = t$

$E = 1/\sin \theta = 1/\sin 60^\circ = 1/0.866 = 1.1547$   
 $E = 1/t$   
 $t = \sin 60^\circ = 0.866$   
 $M = \ln t = \ln (0.866) = 0.1428 = 1/0.695 \sim 1/7$  Economic Multiplier  
 $s = E \times t = |E|t \sin \theta$   
 $s = (1.1547)(0.866) \sin \theta$   
 $s = \sin \theta = t$   
 $s = t$   
 $\sin \theta = F$   
 $E = 1/F$   
 $F = 1/E = t$

Aside

$t = \text{freq} = v = 1/\text{Period} = 1/0.25 = 4$   
 $t = F = Ma = -ks$   
 $(1/0.695)(1/\sqrt{2}) = -0.4233$   $s = 4$   
 $s = -33.9$   
 $s = -80.0 = t$   
 $E = 1/t = -1/8 = -1.25$   
 $E = 1/\sin \theta$   
 $= 1/\sin \pi$   
 $= 1/0 = 1$   
 $E^2 + E - 2 = t$   
 $(1)^2 + 1 - 2 = 0 = t$   
 $t = 0: E = 1$   
 $E = e^{-t} = e^0 = 1$   
 $M = \ln t$   
 $MG = G \ln t$   
 $1.350(6.67) = 9.00 = c^2$

$G \cdot \ln t = 9$   
 $\ln t = 1.350 = \text{Mass of brain}$   
 $t = e^{-1.350} = 0.2592 \sim 0.26$   
 $E = 1/F$   
 $F = 1/E = t$

$F = 0.26$

$F = -ks$   
 $0.2592 = -0.4233s$   
 $s = -0.6124 = t$   
 $s = Et \sin \theta$   
 $\sin \theta = -0.6124$   
 $\theta = t = -3.776$   
 $E = 1/t = 0.265 \sim SF$

$E = 1/\sin \theta = 1/\sin 60^\circ = 1.1547$   
 $t^2 - t = E = 1.1547$   
 $t^2 - t - 2.1547$   
 $t = 105.07 = V +$   
 $V = irR$   
 $105.07 = 4/3R$   
 $R = 0.7880 \sim \pi/4 = 45^\circ$   
Ideal Weight = 100 lbs + 5 (2 inches) = 110 lbs  
Actual weight = 90 lbs  
 $(90/110)/110 = -18.2\%$

Normal Body fat = 22-23% for women  
 $-18.2\% - (22\%) = -40.2\%$   
 $e^{-0.402} = 668 \sim G$

$0.6689^2 - 0.6689 - 1 = -1.221 = 1/81 = E$

$t = c^4$   
 $E = 1/c^4$   
 $E = E^2 = 1$   
 $1/c^4 = E = Mc^2$   
 $E = Mc^4$   
 $1.1547 = M(81)$   
 $= 1426 = 1/701 \sim 1/7 = M$

The Nerves in the brain are a N-body problem. Therefore, the solution applies.

$\int E \cdot \sin \theta = 0.669 = 5.05 (-\cos \theta)$   
 $\cos \theta = 0.666/5.05 = 13188$   
 $\theta = 82.42 = 14385 \sim 1/7 = M$

Aside:  
 $V = irR$   
 $505 = 4/3R$

$R = 3778 = 1/264 = 1/\sin \theta$   
 $\theta = 15.30^\circ = 0.267 \text{ rads} = SF$   
 $M = \ln 0.267 = -1.319$   
 $1350 - 1318 = 3.01 \sim t \Rightarrow E = 5$

### Conclusion

We see there may be a connection between Anorexia and Alzheimer's Disease in this one case.

---

## References

1. Cusack PTE. Sugar and E Coli: diseases of the Nervous System., Journal of Brain and Neurological Disorders. 2020; 2.
2. Cusack PTE. Solution to the Three Body N-Body Problem. (submitted)
3. Cusack PTE. Gonorrhea: Alzheimer's Disease & Eye Problems. SM J of Psyc and Mental Health. 2020.