Flatulence, Tickling, and Whiplash Associated Disorders

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In this short article I will attempt to demonstrate a relationship among three seemingly unrelated facts regarding flatulence, tickling and whiplash associated disorders (WAD) - and I will end with a brief life lesson.

Fact #1: It is well accepted that we do not mind our own flatulence but are completely repulsed by other peopleôs odour. Believe it or not, there is actually a published study on this topic demonstrating that people perceive their own ówhoopsô as less foul than the ówhoopsô of others.[1]

Fact #2: We are all aware of the fact that we cannot tickle ourselves yet burst into laughter at the slightest touch of someone elseôs fingertips in our armpits. There is actually a published paper discussing the possible neurophysiology of this phenomenon.[2]

Fact #3: Individuals who are rear-ended and not-at-fault suffer from persistent pain far more than individuals at-fault who have done the rear ending. Perceived injustice has been associated with severity and persistence of pain after a whiplash injury.[3]

Now allow me to link these three facts together. What makes someone else's flatulence smell worse? What makes us ticklish to someone else's touch? And what makes a óvictimô of a collision suffer more with pain? A single word that may encompass the answer to all three questions is **blame.**

Is it not strange that the majority of the patients seen in outpatient physiotherapy clinics are the ñvictimsò of a collision, apparently through no fault of their own? Is it not the case that there is nearly always another driver at fault? Even in head on collisions one would normally expect an equal degree of injury, but chronic pain seems to occur far more often to the driver not-at-fault.

Of all the patients post motor vehicle accident (MVA) that you have seen over the years, how many have ever actually admitted, *ñI was the drunk the driverò, ñI was the one textingò, ñI was going the wrong way on a one way streetò, ñI made an incorrect turnò, ñI was driving too fastò*? The vast majority of our patients are óvictimsô and express, *ñI was driving safely and suddenly I was hit from behind.ò*

Data from Saskatchewan Government Insurance revealed that 89% of all the WAD claims made were by not-at-fault drivers while only 11% of the WAD claims involved at-fault drivers. [4] Furthermore, even if a WAD claim was put in, the at-fault group recovered faster than the not-at-fault group even when they accounted for other predictors of recovery[4]. Another study based on emergency visits to a hospital in the UK showed that of all the car accident victims who reported WAD, only 4% were actually the at-fault driver, 94% were not-at-fault and 2% were unknown.[5] Basically the admitted at-fault drivers appear to be a minority of the claimants with acute and chronic WAD related symptoms.

One may hypothesize that the prevalence of acute and chronic WAD disorders amongst not-at-fault drivers may be related to monetary and litigation issues, however the evidence supporting this hypothesis is not strong. In fact, similar outcomes were seen in claimants who had settled and had not yet settled their compensation claims, casting doubt on the "cured by a verdict" phenomenon. [6]

One may also propose that the at-fault driver has a greater sense of preparedness prior to the collision, therefore sustains less injury. However that logic fails as, thus far, studies have not shown that the cervical muscles have enough strength to protect the neck from injuries, especially during high impact collisions.[7] On the contrary, a number of individuals with chronic WAD admit to seeing the collision coming and prepared themselves by bracing, later blaming the bracing for worsening their injury. So if neither the potential ñfinancial gainò nor the ñpreparednessò theories are sufficient explanations, then what else could be driving the acute and chronic WAD of not-at-fault victims of MVAs?

Letôs go back to the flatulence scenario: there are no legal or monetary issues when, through no fault of your own, you are forced to smell a foul odour. Generally when individuals are exposed to someone elseôs flatulence, they become disgusted, annoyed and even angry as if their right to fresh air has been infringed upon. They often take immediate action to express their frustration and if possible attempt to remove themselves from the person responsible for the flatulence. Usually a ñblame gameò is played and sometimes hostile words are exchanged. Meanwhile, if they are responsible, there is no one to blame so they cope by tolerating; there is no point in becoming upset at your own flatulence since you are at fault.

Based on survival instincts, the brain is always evaluating the ñthreat valueò of everything we perceive by our five senses. When forced upon us without our consent, the threat value of flatulence, a tickle or an MVA become greater, explaining why we actually perceive a fouler odour, more tickling sensation and more pain, respectively.

We can now appreciate how perceived injustice and playing the ñblame gameò seem to heighten our sensory awareness and pain perception following a not-at-fault MVA. Now here is the clinical challenge: how can we possibly alter our patientsô beliefs about their perceived injustice? One way is through pain education, which has been shown to reduce the ñthreat valueò of pain and improve patient outcomes. [8,9]

I have a crazy hypothesis: I propose how we cope with other peopleôs flatulence determines how we deal with and recover from other unexpected and unpleasant life events such as an MVA. So how can one possibly perceive another personôs flatulence more favourably? Experiment with the power of your brain- the next time you encounter someone elseôs emissions, see if you can consciously reduce the ñthreat valueò of the odour by not blaming, getting angry or catastrophizing. Willfully choose to simply accept that your brief encounter with another personôs foul emissions is certainly a nuisance but definitely not harmful, dangerous or worth getting angry about. You may actually notice that all your future temporary encounters with someone elseôs flatulence will go over much more smoothly. Now apply the same concepts to other life situations and you are set!

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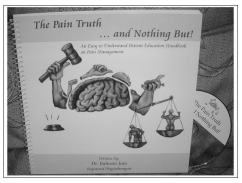

At-fault versus Not-at-fault WAD post MVA[10] (Ferrari & Russell 2001)	
The not-at-fault driver	**The at-fault driver**
Feels anger, resentful and grossly inconvenienced	Feel apologetic, regretful and foolish
Perceives a **sense of injustice**	May feel they “deserve” the injury
Concerned about injury rather than their insurance rate	Concerned more about their insurance rates than any injury
Usually not concerned about the injury incurred to the other driver	Often concerned about the injury inflicted to the other driver
Complains about the careless driver responsible for their situation	Feel they have no right to complain about anyone but themselves
Repeats and discusses with family, friends and health care providers how they are a victim in the accident causing their injury	Do not usually repeat or discuss with family, friends or health care providers how their bad driving caused their injury
Feels unfairly treated by the insurance company	Does not feel entitled to receive compensation for the accident
Battles insurance company over of medical and disability expenses	Has no right to feel poorly treated by the insurance company
Hyper vigilant about feeling symptoms with preconceived notion that rear end collisions result in “whiplash” with expectations of flare ups	Less thought and focus on symptoms
Numerous contacts with health care providers reaffirm expectations of pain and disability	Usually does not seek multiple medical interventions May even be embarrassed to seek any medical attention
May seek legal opinion with lawyers reaffirming potential chronic pain and disability, warning *“don’t settle a claim too soon”*	Does not seek legal opinion as there is no one to file a suit against
Becomes VOMIT (Victim of Medical Imaging Technology) with x-ray showing ‘arthritis’ and MRI showing ‘disc bulges’ adding further to hopelessness and being victimized	Does not seek medical attention therefore does not receive meaningless imaging results and become a VOMIT