

12y female with Coeliac Disease and associated physiological disturbances. A pre-case report.

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Abstract: 8yo female not managing her Coeliac Disease, with constipation and nightmares. Chiropractic adjustments in the Gonstead Methods appropriately modified for her age, somatotype, and disposition, were typically given at segments L2 as PR-m, T9 as PR-T, T6 as PR-T and C3 as PL-La. Counselling supported by conventional chiropractic care produce good outcomes.

Indexing Terms: Coeliac Disease; constipation, sleep issues, behavioural problems, gluten, subluxation.

About this case

T his case is presented as a 'pre-case-report' in the chiropractor's clinical language. The express purpose is to document an interesting case from the day-to-day perspective of a practitioner in a suburban practice in Australia, thus adding to the overall body of evidence for chiropractic. The two elements are the report itself as written by the chiropractor, and 'what we know' compiled by the editorial team.

The method is *Quantitative Autoethnography* with *Thematic Report* of relevant chiropractic literature held within the profession's referent data base, the *Index to Chiropractic Literature*.

Our intent is to provide primary evidence of chiropractic practice which will be indexed and retrievable to guide future case reports prepared by others in the formal 'CARE' style, and to inform the development of research protocols.

Coeliac Disease & associated physiological disturbances in a 12y female patient

Context

The female patient was aged 12 years at this time of this report and had been diagnosed with *Coeliac Disease* (CD) seven years prior. At first consultation, she was 8 years old and it was clear that this patient was not managing her condition well. She was having a range of symptoms related to her CD: poor sleep, constipation and behaviour issues, among others. She was being *'glutened'* by traces of gluten ingested through the day unwittingly. Reports suggest that as many as one third of CD sufferers still have flattened villi in their intestines due to inadvertent gluten ingestion from the diet. A number of papers also suggest that emotional and behavioural disorders are linked with CD.

... a 9yo female with Coeliac Disease and other health challenges responds well to the Gonstead Methods approach, '



History

The patient's parents reported failure to thrive when 4 years, with her younger sister (by 16months) weighing more than her at the time. A diagnosis of CD led to an altered diet supposedly free from gluten, and weight gain. However, the patient still avoided sleeping because of nightmares, waking at 3am most mornings. She also had constipation and fluctuating moods. She was quite thin for her age, but very active with sports and seemed to have a balanced diet. She presented with some generic neck and lower back pains but her visceral and psychological complaints were of greater concern. Her history was otherwise unremarkable.

Examination

The patient was struggling with constipation and pellety faeces, even though she was highly active with sports. Her water intake was passable. She was quite emotional and moody, with her parents sometimes finding her behaviour quite difficult. She was once suspended from school.

Using Gonstead Methods, subluxations were initially found at L2, T9, T6, T3 and C3. Her right ilium was also found to be PIEX. The iliocaecal valve (ICV) was painful and the right *iliopsoas* muscles were tight and sore.

Treatment

Chiropractic adjustments in the Gonstead Methods appropriately modified for her age, somatotype, and disposition, were typically given at segments L2 as PR-m, T9 as PR-T, T6 as PR-T and C3 as PL-La. Her pelvis presented itself as a R) PIEX, but only rarely needed to be adjusted, since the sympathetic nervous system (SNS) and associated coeliac ganglia were the primary focus.

The patient was also advised in detail about how to maintain hygiene to avoid being glutened. No adjustment was given on the first visit due to the importance of explaining how to deal with CD in daily life (note that the author is also a CD sufferer and understands first-hand what can happen when traces of gluten are not removed from the diet). In between the first and second visits, moods and sleep had already improved, just with hand washing and avoiding traces of gluten, with no chiropractic adjustment at all. It became quite clear that when the patient had been glutened (by traces or otherwise), her mood was quite negatively affected which in turn affected the entire household psychologically. The patient's household moved to completely gluten-free once they understood this.

Soft tissue releases were regularly performed at the ICV and R psoas.

Initially, chiropractic treatments were weekly, soon moving to fortnightly. They moved to monthly once constipation issues were resolved, only 3 months into treatment. The direction of drinking more water also seemed to help this patient's constipation, with her faeces changing from pellety to smooth, even though many studies show that drinking more water than usual makes no difference to a child's constipation.

Anecdotal evidence in this case could show otherwise, but it was never a straightforward resolution with her constipation. On the occasions where pellety faeces later because smooth faeces, a R) PIEX adjustment had also been delivered, along with an emotional resolution on the patient's part (that is, fixing up a friendship, changing sport & changing school). Her emotional outlook, fluid intake and a R) PIEX ilium subluxation all seemed inextricably linked with her constipation.

The patient's generic neck and lower back pains resolved quite quickly with chiropractic care and rarely showed themselves again. The patient was also always visibly happier post-treatment. Endorphin release from manual adjustment seemed to have played their part.

Once the constipation issue was resolved 3 months into treatment, the patient's moods were generally average to good, as opposed to often quite bad beforehand. The possibility of lumbo-

pelvic X-rays was discussed (in butterfly view to see if there was perhaps a dolichocolon). However, with the continuation of reasonable mood and absence of constipation, the imaging was not taken.

Outcomes

Moods and constipation were improved with chiropractic care, along with reduced neck and lower back pains. One year after treatment began, as her body was adjusting to finally being gluten-free, T9 shifted to a T10 subluxation, as well as C6 often being the primary for C3. C1 finally presented itself as an ASRP almost 18 months after beginning treatment and has only been adjusted twice. The patient is currently doing very well on all fronts and the R) PIEX ilium has only been adjusted once in the past 12 treatments. She is now at 6-monthly interval check-ups.

The patient had a range of manifestations of her CD. Her parasympathetic nervous system needed stabilisation to begin with and seemed strongly associated with her constipation problems. However, adjusting her SNS was an ongoing requirement. The SNS has a direct effect on the celiac ganglia and given their effect on the gut, this would make anatomical sense. Counselling the patient to remove all traces of gluten from her diet and household was also necessary.

CD is complicated and has far-reaching effects on the nervous system. As such, any practitioner with a CD patient needs to counsel the patient on the virtues of maintaining a truly gluten-free life, as without completely avoiding gluten, the patient has a high chance of still being unwell from a range of causes, even with the most ideal chiropractic adjustments.

What we know

Coeliac (celiac) *Disease* is an autoimmune disorder provoked by proteins from gluten-containing foods such as wheat (gliadin & glutenin) or rye (secalin) or barley (hordein) – or in some cases, even proteins only similar to gluten eg avenalin & avenin from oats. These gluten-containing proteins cause flattened villi (villous atrophy) in the intestines, leading to not only gastrointestinal and malabsorption problems but also a range of psychological and behavioural problems. Some have cited it as '*The Great Imitator*'.

Invariably, CD is labelled due to a positive IgA tissue transglutaminase antibody test (tTg test), a small intestine biopsy and possessing one or both HLA DQ2 and HLA DQ8 genes. In recent years, further studies have indicated that single nucleotide polymorphisms (SNPs) may also have much to do with CD. (1)

The indexing term 'Coeliac Disease' or 'Celiac Disease' returned 11 articles (31 December 2020) in the *Index to Chiropractic Literature*. (2)

Jurgelewicz M discussed that maintaining gluten-free status may not be enough to prevent complications associated with celiac disease, yet Duca RA suggests that nutritional therapy can completely resolve gut complaints. Pillon CL discussed the often ignored problems of infertility (and food complications) that are associated with celiac disease whilst Sodano W discussed CD and associated thyroiditis and the connection to Th17 (T helper) cells and their role in autoimmunity. Anderson B et all found that a patient presenting to a chiropractic teaching clinic had great improvements with gastrointestinal and muscular problems, among others, with diet

^{1.} Celiac disease. SNPedia. URL https://www.snpedia.com/index.php/Celiac_disease

^{2.} Ceoliac or celiac disease. ICL search returns 31 December 2020. URL https://www.chiroindex.org/?action=doSearch&ad-vanced_search=1&search1=celiac+disease&type1=all&bool1=OR&search2=coeliac+disease&type2=all&bool2=AND&search3=&type 3=all&bool3=AND&search4=&type4=all&bool4=AND&search5=&type5=all&bool5=AND&search6=&type6=all&bool6=AND&search7=&type7=all&bool7=AND&search8=&type8=all&bool8=AND&search9=&type9=all&bool9=AND&search10=&type10=all&bool10=AND&search11=&type11=all&bool11=AND&search12=&type12=all&bool12=AND&search13=&type13=all&bool13=AND&search14=&type14=all&bool14=AND&search15=&type15=all&bool15=AND&search16=&type16=all&bool13=AND&search14=&type14=all&bool14=AND&search15=&type15=all&bool15=AND&search16=&type16=all&bool16=AND&search14=&type17=all&bool113=AND&search14=&type18=all&bool18=AND&search19=&type19=all&bool16=AND&search17=&type17=all&bool17=AND&search18=&type18=all&bool18=AND&search19=&type19=all&journalld=&year1=&year2=&peer=&ptld=#results

changes alone. Ohlsen BA went a step further and found that the treatment of acupuncture resolved hives, heartburn and constipation in a CD patient who did not know that she was Celiac. Furthermore, the steroid therapy she was on was stopped because it had been ineffective in resolving her symptoms. After a confirmation of CD, she went gluten-free and then all other symptoms also resolved. Amongst all this, Jarvis KB discussed the need to dispel myths about CD because it led to better case management.

It would seem that the limited literature suggests that altering diet certainly helps improve many health complaints, but it is not enough to maintain good health with a diagnosis of CD because CD is a complex autoimmune disorder that has far-reaching effects. The limited literature suggests that non-medical therapies can also be helpful.

This case promotes conventional chiropractic care as part of the management of CD. The therapy was in the manner Gonstead Methods and was patient-focussed, being guided by findings documented with the Gonstead Methods of spinal analysis, with the identification of subluxation and consideration for the PNS and the SNS, and then adjustment.

Counselling the patient on removing all gluten from her life was also required, given the complex nature of Coeliac Disease.

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About the chiropractor

Dr Stephenson is a December 2005 graduate of Macquarie University, commencing practice in early 2006. This is a busy practice in a country town near Australia's capital city, Canberra.

This report is published with the informed consent of the patient. No identifying information is given.

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