Subject: Debate

Date: Tuesday, 9 June 2009 at 10:09:58 British Summer Time

From:

To: Mike Mew

Dear Mike,

Hypotheses are indeed interesting to discuss and a chat for example about airways and posture is always something which is interesting and which I cover with the undergrads and postgrads every year and indeed I included a question on aetiology in the current final BDS paper. You are quite right that the subject of the aetiology of malocclusion should not fade away. Where we perhaps differ is in thinking that a further public debate will advance our knowledge.

best wishes



--On 05 June 2009 14:57 +0100 Mike Mew <mikemew@gmail.com> wrote:

Dear [Chair of BOS]

Thank you very much for you response.

I will answer your email as directly as possible. You suggest that my views should be put in the same way as all the others and suggest that I should write a review paper. It is very true that an editorial is not a review paper however it did review the situation, being balanced, scientific and correct. You don't want to have an open conversation now, so is it really likely that you would do so if I wrote a lengthier piece with references? It is usual practice in all areas of science for questions to be placed within professional publications and then to be answered by learned and interested individuals. I asked a genuine question that I would like to have tested under scrutiny.

It does strike me as strange that you claim not to understand the philosophy of Orthotropics but still question whether anything could be gained from it. If you don't know, should you not try to find out? I agree that we should try to avoid raising these issues "in the public arena" by having a discussion within the pages of the BDJ. This conversation is not about Orthotropics, it is about the aetiology of malocclusion, bringing up Orthotropics and my Father is only confounding the issue. If you do want further information regarding Orthotropics, several good papers outlining the philosophy have been published (Mew,J.R.C. 1981 "The aetiology of malocclusion: can the Tropic Premise assist our understanding". British Dental Journal. 151; :296-302.) (Mew,JRC. 2004. "The Postural Basis of Malocclusion. Mew.JRC. A philosophical overview". The American Journal of Orthodontics and Dentofacial Orthopedics. 126:729-738) and a book entitled Bioblock (the therapy of Orthotropics) is available from the BDA library.

therapy of Orthotropics) is available from the BDA library.

It is a shame that we meet, or converse, in such circumstances, in any other I am sure that I would very much enjoy an intellectual discussion with you. It happens so little at meetings and seminars which does not make for a vibrant profession, and there is almost no debate on the issue of aetiology. When was the last time that you gave this considerable thought?

There are many papers suggesting that the aetiology is due to the environment. A few more are unlikely to make a large impact since it is natural to quote what corroborates your argument rather than what invalidates it, leading to a tendency to ignore inconvenient facts. The only resolution to this is to test an argument (to prove it wrong), and the best way to do with is through debate.

Is it possible to place an advertisement in the BOS for an opponent or not? Will you give this your support? It is not my intention to be impertinent but issue is not going to fade away.

Very best wishes

Mike

On Sun, May 31, 2009 at 8:03 PM, <Nigel.Harradine@bristol.ac.uk> wrote:

Dear Mike,

The most helpful thing to say is that your views should be put forward in the same way as all others and this does not usually include public exchange of opinions. It is not so much a question of what orthodontics has to lose but rather of what would be gained. Raising the issue "in the public arena" has in the past been counterproductive in terms of acceptance of your fathers views and would be again. If you wish to write a review paper on aetiology of malocclusion and submit it to the JO that would be great. Or a paper entitled "What is orthotropics?" might be helpful.

best wishes

[Chair of BOS]

Thank you very much for your response.

Having an infamous father is not an easy position to be born into. I have, however done my best to remain as truly objective as possible. I must disagree with your suggestion that my Father has not been suppressed though. I have witnessed it, many times. Whether one terms it as a global conspiracy or the natural inclination of a profession to protect what it hold dear, it is usual for people to resent or seek to prevent having their fundamental beliefs questioned and to be unreceptive to what they see as dissent. Orthotropics is so fundamentally different that it is not only poorly received, but also frequently misunderstood.

A lecture or two will not change this, which is why I am seeking an open debate within the profession. If this is impossible then it is likely that my Father will push this into the public arena.

There is a reason that the House of Commons holds debates and it is the same reason that we are democratic. Although neither is perfect, they are the best methods for the purpose. Debates have been fundamental in the history of science. While they tend to be combative, such constructive intellectual combat is necessary whenever two different concepts are to be compared and greater understanding is to be gained. This search for the truth, should not been seen simply as aggression. It should be applauded! What ever the outcome light will be shed on this fundamental area.

Thank you very much for your comment that you would personally always be happy to hear my views and give them good consideration. Without this attitude science does not flourish and progress. However I disagree with your suggestion that a hypothesis should be put up and tested, surely it should be discussed in all and every way before any testing on anyone. This is counter to the "fits the facts best" concept of Popper, where all

the facts should be reviewed against a proposed theory prior to adding an additional fact.

You have written two lengthy texts arguing against following normal scientific protocol. The first argues that in essence we both agree and the second suggests that I should put forward hypothesis to be tested. If your views are sound then what do you have to fear from an open debate within the profession? What do you have to loose by fielding a debating opponent for me through the BOS for such a debate to flourish? And what logic is there preventing us continuing this important conversation on

the pages of the BDJ. I believe that scientific protocol dictates that we should do all of these things. Any other course would be to suppress debate, and you claim that such suppression does not exist in this profession.

Very best wishes

Mike

On Wed, May 27, 2009 at 5:45 PM, <

> wrote:

Dear Michael,

A few points will hopefully be helpful.

The colleagues whom I copied in are the executive and trustees of the BOS because you wrote to me in my current position as chairman, so they should hear my reply.

I would gently say that your father has been given and has taken many opportunities over many years to present his ideas. It is also true that he has been treated with very considerable politeness and by people who have not gone into the general media to say that other colleagues are ruining faces.

It is also true that when invitations to present his views to a particular audience have not been repeated, it has been because of the feedback from audiences. For example, it is slightly unkind to say to yourself but nevertheless true that his customary invitation to speak to the registrars in Bristol for a whole day was eventually discontinued because they firmly recommended their teachers to spare the next course from this session. This was not suppression, but the result of educational feedback.

I do understand of course, that is is very hard for you to have an objective view on these aspects and I respect that personal difficulty.

Regarding the question of a debate, there is much that could be pertinently said, but a few points may be the most helpful. Firstly, public debates tend to be confrontational rather than constructive. They tend to generate heat rather than light (listen to the house of commons). Challenging people to joust does not have a good track record of leaving knowledge advanced or patients better off. In fact it can be counter-productive.

Knowledge advances through hypotheses being formed and tested. Arguing about ideas is less helpful than testing them. As it happens I think it is the mainstream view that environmental factors are not well documented. This leaves the field open to speculation and assertion and you are as free as anyone to put forward ideas. As you say, many ideas are indeed hard to disprove. You refer to putting statements to the test and that indeed is how knowledge advances. Proponents of an idea should suggest how they can be practically tested and if possible be involved in that testing. This is entirely open to you as to all of us, but especially relevant to those who feel strongly about an idea.

I would gently urge you to shift from the mindset of "proving me right or

wrong". This is in tune with the approach of someone spoiling for a fight on a topic. I and most orthodontists are open to the idea that environmental factors are under-appreciated and ill-understood. I don't feel the need to prove someone wrong who agrees with that. I would personally encourage any sound investigation which aims to explore a hypothesis about an environmental factor. The BOSF or any teaching and research group would I am sure look very objectively at any good proposal. Would it not be great if we could identify and measure a definite environmental factor which was amenable to practical change? The fact that this has yet to happen is not because of some worldwide conspiracy - we would all like to be associated with such a breakthrough. The prosaic fact seems to be that this is just a difficult area to test and measure.

Lastly, I would say that it will be much better for everybodys patients if there is no public slanging match on any orthodontic issue and particularly one where there is little hard evidence. This is not an area in need of purported whistle blowing or sensational claims, particularly of the type which lead for example to many children getting measles because of the claim that a vaccine was causing autism. We have to ask ourselves what were the motives of that doctor? I can suggest several but none are compatible with ethical professional conduct.

Mike, by all means put forward hypotheses in a cogent manner. Even better, suggest a method by which one might be tested. This would be better for being in good meetings and journals rather than in other publications and arenas which are less bothered about truth and more about sales. You will not need an opponent for this. I shall personally always be happy to hear your views and give them good consideration.

best wishes

[Chair of BOS]

--On 26 May 2009 09:41 +0100 Michael Mew <<u>mikemew@gmail.com</u>> wro te:

Dear and Colleges, [Chair of BOS]

It does surprise me that, while malocclusion is being treated without a working knowledge of its causes and few of the treatment methods provided address for any of the suspected causes, you would consider not entering an open conversation to discuss the need for a debate on the issue.

You did engage me quite happily behind closed doors, including 15 of your esteemed colleges, an intimidating list of important and impressive names, but do not seem happy to continue the conversation in public. This is not in the spirit of scientific protocol. I would like to respond to your email, stating that I propose that the environment causes nearly allmal occlusion and it is not a mixed cause with the genes, giving ample room for a debate. But this should be an open debate for dentistry not a closed debate for a selected group of orthodontists. Are you are acting as the Chairman of the BOS on behalf of its members (including myself).

All I ask for is an open, fair and free conve sation to allow the evide ce

to speak for its self. This is the foundation of evidence based medicine. This is what has been denied to my Father for 30 years and attempts by him to be heard have been suppressed, while few if any of you have a great understanding of his beliefs. When have any of you put to a fair test anything that he has previously said? He has always been very polite about all of you, which I know has not been reciprocated.

To the rest of this group, I don't know if you have given your expressed consent to be copied into this conversation. I feel that it is now appropriate for you to state if you are not in agreement with the approach and content of sconversation so far. Could you respond in reasonable time or be considered in agreement.

you engaged me in a discussion on the aetiology not the other way around. You were responding to the editorial "The Black Swan" which clearly stated that the true test of a philosophy is not to be proved but that it cannot be disproved. Now it should be for you to prove me wrong rather for me to prove myself right. The measure of a scientist is their willingness and ability to defend what they believe, and I for one am willing and happy to defend my beliefs. Which one of you is also?

Thank you for your time. Yours sincerely,

## Mike

-----Original Message----From:
Sent: 22 May 2009 08:34
To: Michael Mew
Cc:
Subject: RE: Debate

Dear Mike

I'll have a think about the usefulness of sending my mail to the editor of the BDJ.

Why are you so keen on looking for an opponent?

[Chair of BOS]

--On 21 May 2009 23:56 +0100 Michael Mew <<u>mikemew@gmail.com</u>> wro

te:

Dear , [Chair of BOS]

Thank you very much for your well considered answer. I was not expecting this to become such a popular conversation. With great respect I must take issue with a number of points in your email. I will seek to respond to these points but please could you send this to the editor of the BDJ, as I would prefer an open discussion.

There are certainly some gaps in our understanding, and if we want the t ruth then we must start with the aetiology. We have to review what we kn ow and see if there is some sense to it all. And a debate would be an

know and see it there is some sense to it all. And a debate would be all excellent way to start that.

A debate should be scientific, interesting, educational and fun.

On the separate issue, could we possibly discuss placing at advertisement in the BOS asking for an opponent? Why not one of you?

Very best wishes,

Mike



Dear Mike

A debate is an interesting idea. One challenge with this particular debate is that I feel that the hypothesis that malocclusion is caused by a mixture of genes and environment is fairly uncontentious. The mainstream view of the aetiology of malocclusion surely is that it is indeed a mixture. This is mainly a statistical deduction and the result of the well known observations on the Mary Rose skulls and the plague pit skulls. This is what I teach all the undergrads at Bristol and my predecessors before me. Of course very little light has been shed in research as to what the environmental factors are (although there are well known hypotheses relating to airways, pollen, diet, tooth wear etc) and even less light has been shed on any successful intervention with a possible environmental factor apart for the very small effect from Linder Aronsen and his adenoidectomy advocacy of 20 years ago. Even there, he was not attacking the environmental factors which might cause adenoidal enlargement. So I feel your summary of aetiology in the editorial is very mainstream in its broad thrust and i am not sure anyone one would argue against it, although the truth of these well-known more specific hypotheses about airway etc is unknown.

When going on to remedies which are put forward as influencing the environment, of course I realise that you feel that what your father has always referred to as orthotropics is put forward as potentially influencing the environmental factors but given a whole day to present on this in Manchester a few years ago, John was equally at a loss to suggest a line of experimentation that might shed light on our ability to identify or influence an environmental factor. I clearly recall that he felt that some analysis of 3/4 face photos was likely to be the best source of evidence about the effect of treatment. Also i recall that he was unable to offer a series of cases of his own or suggest another clinician who was practising orthotropics who might have some cases which could be prospectively followed. He did mention Harry Orton who had died several years previously as someone who had used his Mew 1 appliance and I remember using that myself when i first met and spoke at length with your father in 1979 when I was working with Harry. As you

know, that appliance aligned the arch before using a functional appliance of your choice including your fathers design. As with the majority of clinicians I remain keen on functional appliances, but am not aware of any of them influencing the proposed environmental factors such as diet, breathing, pollen etc. We do all of course get some very impressive results sometimes when growth turns out to be favourable, but we know that in those case we may well have seen that growth in the absence of treatment which is why controlled trials are so informative. There is little doubt that arch expansion can favourably influence nasal airflow and this is undergoing a renewed popularity of investigation, but whether this change in airflow lasts or is more than a side effect of tooth movement or influences future malocclusion is at present debatable.

So the problem with a debate on genes and environment in aetiology is that it is likely to consist of agreement that both are important, then the putting forward of some hypotheses about environmental factors on which we have little fact to chew over and then an amount of shoulder shrugging.

Regarding the separate issue of the hypothesis that orthotropics effects environmental factors, there are two hurdles to be overcome. Firstly in the 30 years in which i have heard John refer to it on many occasions I have not gained a useful working knowledge of what exactly it is other than the use of functional appliances, arch expansion and possibly some imprecisely defined orofacial exercises. It is fair to say that this is an obstacle to its adoption by another clinician. Secondly, it is only those who practice a technique who can test that technique. Many techniques have been compared e.g. fixed vs removable functional appliances, early vs later treatment of class 2, functional vs fixed appliances for class 2, orthodontics vs surgery. Other novel and at first sight rather unlikely treatment approaches such as reverse pull headgear, RME, all sorts of applications of TADS, self-ligation, have all found enthusiasts and then increasingly good scrutiny and quantified assessment. Even uncomfortable, complex and difficult appliances such as the Frankel which I myself used on a good number of cases in the 1970s found a significant following for a while. A challenge with orthotropics is the lack of adopters and therefore of cases to match and compare.

So although I love debate, I am not sure that aetiology is a fruitful source of difference of opinion. Regarding orthotropics as a potential influence on the environment, I think a lack of users and of comprehension of the proposed distinctive elements hinders the prospects of a further debate being useful at this stage.

Regarding the lack of hard evidence on environmental factors, I suspect that a problem is that changing a proposed influence or number of influences over a long term is difficult in an individual or a society and may be difficult ethically in the absence of sufficient reason to support the intervention. At least we are in good company - we don't yet know much about what causes some people to get osteoarthritis, but we do at least now have excellent hip replacements.

best wishes

[Chair of BOS]

--On 19 May 2009 21:20 +0100 Michael Mew <mikemew@gmail.com> wrote:



I hope that you have received the letter that I sent to you via the BOS. In this I ask if you could, as the Chairman of the BOS, ask if one of your members would like to stand against me in a debate. The hypothesis to be tested would be "Malocclusion is caused by the environment and modified by the genes".

I have over the last few months received several emails from the BOS on subjects such as consultant positions or 2nd opinions for cases, and was wondering if an email could be sent to all the BOS members on this subject. If between us we could write a few lines and send them out, it would then help me to organise such an event. It would be best to meet you but I believe that you are not based in London so that would depend on our movements in the near future.

It really would be a pleasure to meet up with you or even to discuss this by email.

Very best wishes,

Mike

PS Attached is the letter that I sent you and the editorial

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Version: 8.5.339 / Virus Database: 270.12.36/2128 - Release Date: 05/22/09 06:03:00