

Case: UK88

Brand: Gardasil Year of Vaccination: 2012

- **1 dose only – immediate reaction within 10 minutes.**

Main Symptoms

- Dizziness
- Nausea
- Acid reflux
- Abdominal pain
- Headaches
- Bone pain
- Face pain Eye socket pain
- Sensitive to light and noise
- Distortion of taste and smell
- Sensitive to movement
- Sensitive to movement
- Muscle weakness
- Muscle aches and pains
- Fever
- Exhaustion
- Mental fatigue
- Recurrent sore throat
- Vomiting
- Fainting on standing,
- etc
- **New menstrual problems**
 - Irregular
 - Very heavy/flooding
 - Passing clots
 - Long lasting
 - Very painful
 - Put on contraceptive pill/implant for relief

Vitamin & Mineral deficiencies

- Vitamin D

Effect on Daily Living

- **Needs care 24/7. Unable to do anything for herself**
- **Cannot be left alone**
- **Totally confined to bed**

Treatment by Medical Professionals

- **Seen by approx. 18 doctors/specialists**
- **Attended A&E and been admitted to hospital**
- **Humiliated, ridiculed and demeaned by doctors**
- **Told it is ‘all in your head’**
- **Pervasive refusal disorder suggested**

Reporting to MHRA via Yellow Card System

- **Yellow Card submitted by school nurse**
- **Never contacted by MHRA**
- **Manufacturer not contacted**

Confirmed Diagnoses

- **POTS (took 28 months to diagnose)**
- **CFS/ME**
- **Vit. D deficiency**
- **Anaemia**
- **Spinal Syringomyelia**
- **Lacunar infarct**
- **Gastric reflux**
- **Chronic pain**
- **Hypermobility**
- **Gluten, wheat and dairy intol.**
- **Serious sensitivity to all meds.**
- **Immobility**

POTS-type symptoms: 33/33

Includes:

- Dizziness
- Syncope/fainting
- Tachycardia
- Palpitations
- Chest pain
- Frequent headaches
- Fatigue
- Weakness
- Difficulty concentrating
- Shaking/tremors
- Shortness of breath
- Difficulty breathing
- Cold hands and feet
- Visual problems
- Sensitivity to light and noise
- Unrefreshing/disturbed sleep
- IBS
- Diarrhoea and constipation
- Nausea
- Excessive sweating
- Intolerance of heat
- Intolerance of exercise
- Legs/feet change colour on standing

CRPS-type symptoms: 11/13

Includes:

- Prolonged pain
- Burning pain
- Pins and needles
- Changes in temp. to affected limbs
- Changes in skin colour to affected limbs
- Intol. Of touch
- Swelling of painful limbs
- Abnormal sweating patterns
- Stiffness in affected joints
- Tremors

Case: UK82

Brand: Cervarix Year of Vaccination: 2008

- Unaware of any known side effects
- **Bullied/coerced into consenting**
- 2 doses
- **Did not have 3rd jab because was too poorly from first two and hospital advised not to have 3rd**

Main Symptoms

- **Symptoms appeared on the day of the vaccine**
- Joint pain in every joint/bone
- Muscle aches
- Fatigue
- Chest pain
- Palpitations
- Headaches
- Nausea
- Dre eye
- Tremors
- Dizziness
- Sore Throat
- **New menstrual problems**
 - Irregular
 - Very heavy/flooding
 - Passing clots
 - Long lasting
 - Very painful
 - Put on contraceptive pill/implant for relief

Effect on Daily Living

- **Initially unable to attend school or even home tutoring.**
- Gradually able to attend school on reduced timetable
- Now attends university but lives at home due to health care needs
- **Needs help with most daily things such as cooking, cleaning, changing clothes**
- **Talented athlete that dreamed of being a professional but now cannot walk down the road**

Treatment by Medical Professionals

- Seen by approximately 9 doctors/specialists
- Attended A&E and been admitted to hospital
- **Tonsils removed due to ongoing sore throat**
- Endoscopy and colonoscopy for further investigation
- **Told 'it was all in her head'**

Reporting to MHRA via Yellow Card System

- **Never told by doctors or nurses about Yellow Card system despite it being an obvious adverse reaction to vaccine and being advised by hospital not to have 3rd dose**
- Yellow Card now submitted by self

Confirmed Diagnoses

- **ME/CFS**
- **Polycystic ovaries**

POTS-type symptoms: 26/33

Includes:

- Dizziness
- Tachycardia
- Palpitations
- Chest pain
- Frequent headaches
- Fatigue
- Weakness
- Difficulty concentrating
- Shaking/tremors
- Shortness of breath
- Difficulty breathing
- Cold hands and feet
- Sensitivity to light and noise
- Unrefreshing/disturbed sleep
- Insomnia
- Diarrhoea and constipation
- Bloating
- Nausea
- Excessive sweating
- Intolerance of heat
- Intolerance of exercise

CRPS-type symptoms: 8/13

Includes:

- Prolonged pain
- Burning pain
- Pins & needles
- Restricted movement of limbs
- Intolerance of touch
- Abnormal sweating patterns
- Stiffness of joints
- Tremors

N.B. still awaiting POTS diagnosis 7 years after vaccination/initial symptoms

Case: UK85

Brand: Cervarix Year of Vaccination: 2010

- 3 doses

Main Symptoms

- **Symptoms appeared on day of 3rd injection – taken to A&E that night, burning up and site of injection inflamed and hard. She had headache, was sick and distressed**
- Fatigue
- Nausea
- Vomiting
- Light headed
- Migraine
- Joints dislocating and locking
- Poor appetite
- Visual disturbances
- IBS
- Recurrent sore throats
- Falls
- **New menstrual problems**
 - Very heavy/flooding
 - Passing clots
 - Very painful

Vitamin & Mineral deficiencies

- Vitamin D

Effect on Daily Living

- **Unable to attend education or study**
- **Needs help with daily care**
- **Not safe to leave alone for more than one hour**
- **Largely housebound and feels isolated**

Treatment by Medical Professionals

- **Seen by approx. 8 doctors/specialists**
- **Attended A&E and been admitted to hospital**
- **Sent home on one occasion whilst still constantly vomiting**
- **Told by doctor they are unable to help because her case is too complex**
- **Accused of time wasting**
- **Told by pharmacist he thought it could be a reaction to the vaccine**

Reporting to MHRA via Yellow Card System

- **Don't know if Yellow Card submitted (asked GP to submit)**
- **Not contacted by MHRA**

Confirmed Diagnoses

- **Hemiplegic migraines**
- **CFS/ME**

POTS-type symptoms: 26/33

Includes:

- Dizziness
- Tachycardia
- Palpitations
- Chest pain
- Frequent headaches
- Fatigue
- Weakness
- Fuzzy thinking
- Difficulty concentrating
- Memory problems
- Difficulty breathing
- Cold hands and feet
- Visual problems
- Sensitivity to light and noise
- Unrefreshing/disturbed sleep
- Sleep reversal
- IBS
- Diarrhoea and constipation
- Bloating
- Abdominal pain
- Vomiting
- Nausea
- Excessive sweating
- Intolerance of heat
- Intolerance of exercise
- Legs/feet change colour on standing

CRPS-type symptoms: 6/13

Includes:

- Change in temp. to affected limbs
- Changes in skin colour
- Restricted movement in limbs
- Intol. Of touch
- Abnormal sweating
- Stiffness in joints

Currently being assessed for POTS (at request of parent) after 5 years of typical symptoms not being picked up by medical professionals

Case: UK86

Brand: Cervarix Year of Vaccination: 2010

- Unaware of any known side effects (trusted the information from the school that this vaccine was safe)
- 2 doses
- **Dr recommended not to give 3rd dose as too ill.**

Main Symptoms

- **Symptoms appeared immediately after 1st jab and lasted a week. They again appeared immediately after 2nd jab and lasted 3 weeks. Long-term illness started approx. 8 weeks after the 2nd jab.**
- Headache
- Dizziness (inc. vasovagal collapse)
- Fatigue (sometimes to the point of being bed-bound and at all times limiting functioning)
- Nausea
- Aching limbs,
- Intolerance of noise,
- Fit-like episodes
- Spasms in hands and legs
- Backache
- Sore throats
- Crushing chest pain and chest weakness
- Feeling unable to breath
- Extreme fatigue
- Hair loss
- Moment of temporary blindness
- Feeling excessively hot or cold
- Cold hands and feet
- Stomach pains
- Severe gastric problems with food intolerance
- Pins and needles
- **New menstrual problems**
 - **More painful**
 - **Generally feels more ill**

Vitamin & Mineral deficiencies

Private blood/cell tests found zinc deficiencies, low L-carnitine, too much nickel and chromium, low whole cell ATP, low mt-ATP and poor provision of ATP, very-rapid depletion of ATP on increased energy demand, low ATP-related magnesium, very poor ADP to ATP conversion, mild increase in cell-free DNA plasma, niacin (B3). Also some low enzyme activity (on a superoxide dismutase test).

Effect on Daily Living

- **Only able to attend school on a reduced timetable/home tuition**
- **Not safe to be left alone for more than an hour**
- **The level of illness post vaccination has completely changed her life**

Treatment by Medical Professionals

- **Seen by 10 doctors/specialists**
- **Attended A&E and been admitted to hospital**
- **Told by doctor (off the record) that they believe the illness has been caused by vaccine**

Reporting to MHRA via Yellow Card System

- **Yellow Card submitted by parent (not by health professional, despite believing illness caused by vaccine)**
- **No contact from MHRA**

Confirmed Diagnoses

- Post viral fatigue
- **CFS/ME**
- **POTS**

POTS-type symptoms: 20/33

Includes:

- Dizziness
- Chest pain
- Frequent headaches
- Fatigue
- Weakness
- Difficulty concentrating
- Memory problems
- Shaking/tremors
- Shortness of breath
- Difficulty breathing
- Cold hands and feet
- Visual problems
- Bladder problems
- Sensitivity to light and noise
- Unrefreshing/disturbed sleep
- Abdominal pain
- Nausea
- Excessive sweating
- Intolerance of heat
- Intolerance of exercise

CRPS-type symptoms: 6/13

Includes:

- Change in nail/hair growth

N.B. 4 years to diagnose POTS

Case: UK87

Brand: Gardasil Year of Vaccination: 2013

- 1 dose
- School nurse and GP surgery nurse said she would be fine and **made me feel terrible for even considering her to not have it**

Main Symptoms

Symptoms appeared after just 20' of 1st and only jab

- Joint pains
- Nausea
- Diarrhoea
- Dizziness
- Extreme tiredness
- Random bouts of vomiting
- extreme belching after eating
- acid reflux
- extreme abdominal pain
- Extreme fatigue.
- **New menstrual problems**
 - **Very painful**
 - **Very heavy/flooding**
 - **Passing clots**
 - **Long lasting**
 - **Put on contraceptive pill/implant for relief**

Vitamin & Mineral deficiencies

- Iron and Vitamin D (GP)
- All vitamins and minerals low (private clinic)

Effect on Daily Living

- **The vaccination lost her childhood and first teenage years**
- **No quality of life after first injection**
- **Regular stays in hospital and on a feeding tube.**

Treatment by Medical Professionals

- **Seen by approx. 20 doctors/specialists**
- **Attended A&E and been admitted to hospital**
- **Told her symptoms were psychological (all in her head)**
- **Accused of time wasting**

Reporting to MHRA via Yellow Card System

- **Yellow Card has been submitted by parent**
- **Not contacted by MHRA**

Confirmed Diagnoses

- IBS
- CFS
- Hypersensitivity of bowel
- Hypermobility

POTS-type symptoms: 15/33

Includes:

- Dizziness
- Frequent headaches
- Migraine
- Fatigue
- Weakness
- Difficulty concentrating
- Unrefreshing/disturbed sleep
- Insomnia
- Sleep reversal
- IBS
- Diarrhoea and constipation
- Bloating
- Abdominal pain
- Vomiting
- Intolerance of exercise

Case: UK06

Brand: **Gardasil** Year of Vaccination: **2012/13**

- Completed all 3 doses despite **symptoms after 1st dose**
- **Symptoms started within 2 days**

Main Symptoms

- Heart problems
- Aversion to light
- Severe pain in hands/feet
- Aversion to sniffing
- Aversion to noise
- Missed periods (2yrs)
- Fatigue
- Loss of energy
- Mood swings
- Anger
- Chest pain
- Palpitations
- Cognitive problems
- Visual problems
- Abdominal pain
- Sleep problems
- Weakness

- Seen at least 7 doctors since symptoms began
- Told symptoms were psychological by doctors
- Menstrual Problems – no periods for 2 yrs, then light & scant
- Not tested for Vitamin Deficiencies
- Accident & Emergency visit(s) made
- Considerable impact on daily living
- Unable to attend full time education

- **Doctors have threatened to involve social services/child protection agencies**

Reporting to MHRA via Yellow Card System

- Yellow Card submitted by Parent
- Parents were unaware of Yellow Card System at the time of vaccination or onset of symptoms
- Parents have not been contacted by MHRA to follow up Yellow Card report

Comments

Effect on Daily Living

- Unable to socialise with friends or stay out for long due to fatigue and noise aversion. New friends will not accept her due to new strange behaviours.
- My daughter was predicted B grade GCSEs and achieved D, E, F. She could not attend the last 3 months of school and has tried to attend college twice but cannot get through a whole week. Her life is ruined and she will never be able to fulfil her dream of being an engineer.

Treatment by Medical Professionals

- I discussed the vaccine with my daughters doctors but they said they did not know what was in it and we had to go away and get on with it.
- We were given no support by our doctors and no tests – just a referral to a psychologist after one year. All treatments have been paid for privately by us.

General

- My daughter had a horrific and immediate reaction to the vaccine and was rolling on the floor screaming and crying in pain.
- When we give our daughter food or drink we are given a list of ingredients, if we give her medicines or remedies we are given the recommended dose, ingredients and side effects. We have none of this when we vaccinate
- Before consenting to the HPV vaccination, I would like parents to be given a list of ingredients for the vaccine, safe dosage and list of all side effects
- I would like a list of conditions that if a child has, or a member of the immediate family, they are excluded from the HPV vaccination programme (eg hyperthyroid)

Confirmed Diagnoses

- Austistic tendencies diagnosed age 15
- Systolic heart murmur

POTS-type symptoms: 11/33

Includes:

- fatigue
- paresthesia
- Sleep problems
- cognitive problems

CRPS-type symptoms: 1/13

Includes:

- pins and needles

- **Never assessed for POTS or CRPS**

Case: UK14

Brand: **Gardasil** Year of Vaccination: **2012/13**

- **Completed all 3 doses despite symptoms after 1st & 2nd doses**
- **Symptoms started days after each dose and worsened each time**
- **Felt bullied or coerced into having the vaccination**

Main Symptoms

- Immediate hair loss – now total hair loss
- Lacking energy
- Rarely able to do a full week in school now
- Fatigue
- Lethargy
- Seen at least 6 healthcare professionals since symptoms began
- At some time told by doctors that symptoms were psychological
- **No one has been prepared to test for vitamin and mineral deficiencies**
- Menstrual problems – light and scant
- Have been accused of time wasting
- Unable to attend full time education – attended on a reduced time table

Reporting to MHRA via Yellow Card System

- Yellow Card has been submitted by Parent
- Parents were NOT aware of Yellow Card System at the time of vaccination and onset of symptoms
- Parents were NOT aware that Yellow Card reports can and should be updated with new diagnoses or results
- Parents have NOT been contacted by MHRA to follow up Yellow Card report

- **Parents reported suspected ADR to Sanofi Pasteur - their response was to send a print-off about the benefits of HPV vaccination**

Comments

Effect on Daily Living

- Devastating. Had to give up trampolining, gymnastics and swimming

Treatment by Medical Professionals

- Has discussed HPV vaccination as a cause of daughter’s illness with doctors but dismissive and uninterested and said “I’m mad!”
- Treatment by healthcare professionals has been awful. They won’t even give her an indepth blood test. They don’t want to see her again and say it’s not ‘medical’.
- **Have felt bullied, threatened or intimidated by doctors when discussing the vaccination**

Relating to Diagnosis

- Have been told by doctors that daughter’s case is too complex for them to help

Confirmed Diagnoses

- Epilepsy with focal centre, spreading generally
- Ecological doctor diagnosed that daughter had lost 25% of cell membranes, hence neurological functioning affected. Also revealed loss of many essential nutrients

POTS-type symptoms: 9/33

Includes:

- tachycardia
- fatigue
- cognitive problems

CRPS-type symptoms: 1/13

Includes:

- abnormal sweating pattern

- **Awaiting POTS assessment**

- **Doctor initially refused to refer for POTS assessment – had to beg for the referral**

Case: UK16

Brand: **Cervarix** Year of Vaccination: **2011**

- Only received 1st and 2nd doses – refused 3rd dose
- **Symptoms after 1st dose and more severe after 2nd dose**

Main Symptoms

- Vertigo
 - Nose bleeds
 - Swollen glands
 - Intolerances
 - Abdominal pain
 - Sore throats
 - Easy bruising
 - Open painful sores on forehead & scalp which wouldn't heal
 - Susceptible to viruses which last a lot longer than normal
 - Cloudy thinking with some memory loss
 - Seen at least 8 healthcare professionals since symptoms began
 - Vitamin and Mineral Deficiencies – Vit D, low ferritin
 - Menstrual problems – very heavy and very painful
 - Considerable impact on daily living
 - **Have felt intimidated by doctors when discussing the HPV vaccination in relation to daughter's illness**
- Nausea
 - Temperature
 - New allergies
 - Heavy, painful periods
 - Painful neck, shoulders and back
 - Feeling cold
- Fatigue
 - Headaches
 - Food

Confirmed Diagnoses

- **POTS (awaiting appointment to confirm)**
 - Axial spondyloarthopathy (pre-radiographic)
 - HLA-B27 positive
 - Hypermobility
 - Fibromyalgia
 - Chronic Fatigue Syndrome
 - Severe Functional Gut Disorder
- POTS-type symptoms: 14/33
Includes:
- fainting
 - nausea
 - fatigue
 - dizziness
 - cold extremities
 - sleep problems
 - cognitive problems
- CRPS-type symptoms: 6/13
Includes:
- prolonged pain
 - pins and needles
 - stiffness in affected joints

Reporting to MHRA via Yellow Card System

- Yellow Card has been submitted by Parent
- Parents were NOT aware of Yellow Card System at the time of vaccination and onset of symptoms
- Parents were NOT aware that Yellow Card reports can and should be updated with new diagnoses or results
- Parents have NOT been contacted by MHRA to follow up Yellow Card report

Comments

Effect on Daily Living

- My daughter had a very happy active life before Cervarix. She loved sports, spending time with friends etc. After Cervarix she had to stop her sports because the vaccine stole her energy.
- She's missed so much school. I don't think she has spent a full week in school in the past year and a half.
- I feel the last 4 years of her life have been stolen from her. She wants to work but she can't she hasn't got the energy. She's unable to do the things her friends are doing because she can't keep up with them because she just hasn't got the energy. On a bad day her energy can be so bad she is unable to speak because she hasn't got the energy.

General

- My daughter had her life planned out. She wanted to work as soon as she turned 16 and she wanted a full and active life.
- She wanted to move away to University and travel and play sports. She hasn't the energy to work or play sports.
- She's unable to keep up with her friends and she's misses out on a lot.
- She frequently feels poorly and she gets a lot of viruses that take a lot longer to go.
- She had boundless amounts of energy before this vaccine. She can sleep for 20 hours and still feel very fatigued when she wakes.

Case: UK17

Brand: **Cervarix** Year of Vaccination: **2009/10**

- Completed all 3 doses **despite symptoms after 1st dose**
- **Symptoms started on the same day of the first dose and got worse with each subsequent dose**
- On medical notes: *"mums come alone – 'X' felt sick and nausea since 1st HPV vaccination – reassured OK for next"*

Main Symptoms

- Dizziness • Brain fog • Tachycardia • Chest Pain • Nausea
- Fatigue • Weakness • Abdominal pain • Joint pain • Fainting
- Gynaecological problems

- Seen at least 16 doctors since symptoms began
- Told symptoms were psychological by doctors
- Menstrual Problems – irreg, painful, heavy/flooding, long lasting
- Not tested for Vitamin Deficiencies
- Accident & Emergency visit(s) made
- Admitted to hospital as an inpatient
- Considerable impact on daily living
- Unable to attend full time education

Reporting to MHRA via Yellow Card System

- Yellow Card submitted only recently by Parent
- Parents were not informed about Yellow Card System by any medical professionals
- Parents have recently been contacted by MHRA to follow up Yellow Card report

Comments

Effect on Daily Living

Went from a very lively, active, fun loving teenager, riding and swimming – to only being able to be out of bed 2 – 3 hours a day at its worst points • Very determined to continue education – but struggled to keep up due to frequent illness and absence – achieved lower grades than predicted due to illness • Social life and friendships affected

Treatment by Medical Professionals

- We have mentioned the vaccination to every doctor or consultant – but over all these years the reaction was: Not interested • Dismissive • Impatient • Not prepared to consider it • Patronising • Eye-rolling and sighing. One consultant, who has been a breath of fresh air, and who recently said about my concern regarding the HPV vaccine: *"Whilst unproven, an infective or immune trigger is not unusual and that theory has certain attraction"*
- A&E has been awful experiences on every occasion and in 3 hospitals. Doctors and nurses have rarely heard of POTS and we have had occasions when they have googled it on iPads in front of us – whilst ignoring what we need to tell them about fluids, painkillers etc.

Relating to Diagnoses

- It is difficult to describe how horrendous it is not to be believed and to be dismissed as an irrational teenager *"who should just get on with her life"* or an over worrying parent who should *"stop worrying – there is nothing wrong with your daughter"*.
- At my daughter's very worst – and having recently come out of hospital, we saw a new GP who spent a long time telling her to get on with her life and who wrote the name down of a book about illnesses all in the mind and gave it to her as her prescription. We got outside the surgery and both sobbed with frustration
- We got several misdiagnoses first – costochondritis, oesophageal spasms by heart specialists and chest specialists before POTS was suspected.

General

- **Despite mentioning the vaccination to over 16 health professionals, not one reported it or told us about the Yellow Card System**

Confirmed Diagnoses

- **POTS**
- Chronic Fatigue
- Polycystic Ovary Syndrome (PCOS)
- Joint pain
- Sphincter of Oddi Dysfunction (SOD)
- Small hepatic nodule discovered via cholecystectomy–thought to be aFNH

POTS-type symptoms: 17/33

Includes:

- nausea • fatigue • dizziness
- tachycardia • Sleep problems
- cognitive problems

CRPS-type symptoms: 2/13

Includes:

- swelling of painful limbs
- stiffness in affected joints

- **Told by doctor that POTS/Dysautonomia was not mainstream health issues to be taken seriously**

Case: UK19

Brand: **Cervarix** Year of Vaccination: **2008/09**

- Completed all 3 doses **despite flu-type symptoms after 2nd dose**
- **Stiff, swollen and sore arm after 2nd dose, flu-type symptoms 24hrs after 2nd dose, and other symptoms appeared after 3rd dose**

Main Symptoms

- Dizziness
- Nausea
- Palpitations
- Numbness
- Pins & needles
- Pre-syncope on standing
- Low blood pressure
- Unrefreshed sleep
- Facial/neck rash
- Acne
- Tremors
- Fatigue
- Body pain
- Poor memory
- Poor concentration
- Motion sickness
- Food intolerances
- Poor vitamin absorption
- Painful clicking joints (especially jaw and shoulders)
- Sore throats
- Unable to regulate body temp.
- Painful, heavy & prolonged periods
- Unexplained abdominal/chest pain with area tender to touch
- Thinning of hair to the crown
- Sensitive to bright light and loud noise
- Seen at least 14 specialists plus GPs since symptoms began
- Vitamin and Mineral Deficiencies – Vit D, Vit B12, Sel., Folate, Zinc
- Menstrual problems – irregular, painful, very heavy/flooding, long lasting
- Accident & Emergency visit(s) made
- Admitted to hospital as inpatient
- Considerable impact on daily living
- Unable to attend full time education – had reduced time table & home tuition

Reporting to MHRA via Yellow Card System

- Yellow Card has been submitted by Parent
- Parents were NOT aware of Yellow Card System at the time of vaccination and onset of symptoms
- Parents have been contacted by MHRA to request batch numbers and dates of vaccination which was already given on original submission.

Comments

Effect on Daily Living

- She was unable to focus, concentrate and the more school she missed due to ill health the harder it was to catch up. Subjects that she was passionate about and did well in (Latin & History) became too intense. She was too ill to sit A2 exams and missed the opportunity to go to University with her peer group.

Treatment by Medical Professionals

- Our daughter was passed from one specialist to another – continually questioned about her weight loss and how stressed she felt. This made her feel she was a hypochondriac and attention seeking whilst all the time her symptoms were developing and her health deteriorating to a point where she became unable to function normally. We were told twice by different GPs that our daughter’s diagnosis was “way above their pay grade”. We rely on private consultations with London based specialists.

General

- After 2nd dose arm was stiff, swollen & sore...24 hour achy flu symptoms followed. After the 3rd jab tiredness, achy muscles became the norm and then intermittent feeling faint and nauseous. GP diagnosed low blood pressure 27/10/11 and other symptoms followed quite quickly after this.
- For the best part of 4 years this illness has severely blighted our daughter’s life – it shows no sign of abating and we pray no more symptoms will appear. The worst feeling is we cannot do anything to eradicate the problem and it seems no-one else can either. Her dreams & ambitions have shrunk, her confidence is ebbing away, friendships fade due to inability to go out, attend parties, shopping etc.
- The symptoms are extremely debilitating and there seems no cure available even when a diagnosis is achieved. The future feels very uncertain. We worry if our daughter will ever be able to re-enter society in a normal way or always be limited as she is now. The road to diagnosis was long and painful often resulting in despair. We feel lucky to have private insurance though we now find ourselves having to self-fund and travel to London regularly to specialist care.

Confirmed Diagnoses

- **Autonomic nerve dysfunction with associated POTS**
- Ehlers Danlos Syndrome Type 3
- Histamine Intolerance
- Wheat Allergy
- Vitamin Deficiencies
- Post-acute glandular fever showing in bloods for 12 months

POTS-type symptoms: 23/33

Includes:

- headaches
- vomiting
- fatigue
- dizziness
- chest pain
- cognitive problems

CRPS-type symptoms: 9/13

Includes:

- prolonged pain
- pins and needles
- stiffness in affected joints
- intolerance of touch to affected limb

Case: UK20

Brand: **Cervarix** Year of Vaccination: **2010**

- Completed all 3 doses
- **Became dizzy, fatigued and experienced black outs immediately after the 3rd dose**

Main Symptoms

- Dizziness
- Black outs /collapse
- Tonsillitis x 13
- Muscle weakness
- Mental fatigue
- Insomnia
- Wheeziness (relieved by inhaler)
- Joint pain – back, neck, hips, knees
- Headache
- Abdominal pain
- Sensitive to light
- Fever & cold
- Chest pain
- Mobility problems
- Nausea
- Urine infections
- Sensitive to noise
- Chronic fatigue
- Visual problems
- Seizures
- Unable to regulate body temp
- Seen at least 8 healthcare professionals since symptoms began
- At some time told by doctors that symptoms were psychological
- Vitamin and Mineral Deficiencies – numerous
- Menstrual problems – irregular, light and scant, very painful
- Accident & Emergency visit(s) made
- Admitted to hospital as inpatient
- Considerable impact on daily living
- Unable to attend full time education – 2 years out of education completely and then on reduced time-table
- **Have felt bullied, threatened or intimidated by doctors when discussing the vaccination in relation to daughters illness**

Reporting to MHRA via Yellow Card System

- Yellow Card has been submitted by Parent
- Parents were NOT aware of Yellow Card System at the time of vaccination and onset of symptoms
- Parents have NOT been contacted by MHRA to follow up Yellow Card report

Comments

Effect on Daily Living

- My daughter cannot go out alone and is frequently too exhausted to do anything outside of the home environment. She is very much housebound. She attends a part time access course (2 evenings a week). She has to be driven there and collected and parent on call if she is too ill to stay or blacks out. She cannot do anything on the day she attends college to conserve energy and has to sleep for at least 2 hours during day to be able to attend. This course is to compensate for not being able to complete her A levels, she struggled during the first year with regular collapses and being too fatigued to attend. She had to have the whole of second year off due to above mentioned and constant tonsillitis.
- My daughter worked extremely hard at school, achieved top grades and was involved in various sports and groups such as anti bullying, school ambassador etc. She spent the last year of secondary school attending irregularly, bedbound for 3 weeks prior to her GCSE exams and had to give up all sports and some subjects due to extreme illness. She spent a further year at sixth form college to do her AS levels- most of that was spent attending irregularly, having collapses at college and having to be collected and having work sent to her at home when she could not get in

Treatment by Medical Professionals

- At an A&E visit, my daughter was unable to stand, was sweating profusely, blacking out repeatedly, eyes rolling and in extreme pain all over - nurses would not prioritise her and were flippant. When I became very angry and insistent, the nurse tried to make my daughter walk to a bay to be seen by a Dr and made sarcastic remark about her 'getting in a state'. When eventually seen by Dr, she had grade 3 tonsillitis which had very nearly closed her throat completely and was at high risk from septicaemia.
- At another A&E visit where my daughter had been brought by ambulance following a black out and seizure, A&E doctor told us to see a psychiatrist

Confirmed Diagnoses

- **POTS**
- Vaso vagal syncope
- CFS/ME

POTS-type symptoms: 22/33

Includes:

- headaches
- dizziness
- problems
- nausea
- chest pain
- cognitive problems
- fatigue
- sleep

- **Time to POTS diagnosis: 4 years 4 mths**

Case: UK21

Brand: **Cervarix** Year of Vaccination: **2010/11**

- **Completed all 3 doses despite symptoms after 1st and 2nd dose**
- **Symptoms started less than 2 hours after 3rd vaccination**

Main Symptoms

- Initial flu-like symptoms
- Fatigue
- Feeling cold
- Abdominal pain
- Joint pain & clicking
- Back pain
- Cold extremities
- Bruises easily
- Irregularity on cranial MRI scan
- Unable to walk (3 yrs)
- Unable to stay awake
- Sleeping 22hrs/day
- Coma-like sleep (13 wks)
- Unable to wake self (18 mths)
- Total loss of appetite
- Const. retractable headaches (4 yrs)
- Frequent urine infections

- Seen at least 40 doctors since symptoms began
- Told symptoms were psychological by doctors
- Prior to HPV vaccination experienced serious ADRs to MMR
- Has been admitted to hospital as inpatient twice
- Cannot be left alone
- Very severe impact on daily living
- Unable to attend full time education – Home tuition has been absolutely minimal and none in the last 2 years

- **Doctors have threatened to and have involved social services/child protection agencies (TWICE wrongly investigated for Fabricated or Induced Illness)**

Reporting to MHRA via Yellow Card System

- Yellow Card submitted by Parent and Specialist
- Parents were NOT aware of Yellow Card System at the time of vaccination or onset of symptoms
- Parents have not been contacted by MHRA to follow up Yellow Card report
- Parents also reported ADR to GSK but they showed little interest

Comments

Effect on Daily Living

- My daughters life and that of the immediate family has been almost destroyed over 4 years.
- Has only been able to attend school for a few hours over the last 4+ years, not at all in the last 2 years. She has only received basic, minimal home tuition, none for the last year.

Treatment by Medical Professionals

- **First Paediatric consultant wrote to GP stating ‘it is likely to be caused by the vaccine’.** Next paediatric consultant stated ‘the benefits outweigh the risks’. Generally nobody wants to consider the vaccine.
- **Parents felt bullied, threatened or intimidated by doctors**

General

- FOIA requests have identified that the MHRA are aware of almost 20,000 adverse reactions being reported by Yellow Card. 32% are considered serious. 5 fatalities have been reported. Publicly the MHRA state they are not aware of any serious adverse reactions.
- **We chose not to have the vaccine because our daughter had a severe reaction with the MMR vaccine (immediate full dose of measles, followed by hospitalisation in isolation ward due to suspect meningitis and very enlarged lymph nodes which remained for approx. 1 year until removed by surgery). However, the school nurse contacted mum and explained that this vaccine is nothing like the MMR and safe. She also explained that our daughter was being denied a lifesaving vaccine so mum reluctantly signed the consent.**

Confirmed Diagnoses

- Severe CFS/ME (4 yrs to confirm diagnosis)
- Anorexia Nervosa
- Suspect encephalitis lethargica (2 doctors – NHS refused to assess/test)
- Suspect cranial lesions
- Suspect brain tumour

POTS-type symptoms: 18/33

Includes:

- headaches
- nausea
- fatigue
- Sleep problems
- cognitive problems

CRPS-type symptoms: 5/13

Includes:

- prolonged pain
- changes in temp of affected limbs
- changes in colour of affected limbs

- **Referrals for POTS or CRPS assessment have never been made despite reminders over last 12 months**

Case: UK22

Brand: **Cervarix** Year of Vaccination: **2011**

- Completed 2 doses – **refused 3rd dose because of reaction to 2nd dose**
- **Symptoms started within 24hrs of second injection**

Main Symptoms

- | | | |
|--------------------|----------------------|--------------------|
| • Exhaustion | • Diarrhoea | • Fainting |
| • Feeling cold | • Sickness | • Weight loss |
| • Vit D deficiency | • Calcium deficiency | • iron deficiency |
| • Lips go blue | • Insomnia | • Food intolerance |

- Seen at least 6 doctors since symptoms began
- Vitamin Deficiencies –Vit D, Calcium, Iron
- Menstrual problems - irregular
- Considerable impact on daily living

Reporting to MHRA via Yellow Card System

- Yellow Card submitted by School Nurse
 - Parents were NOT aware of Yellow Card System at the time of vaccination or onset of symptoms
 - Parents were NOT aware that Yellow Card reports can and should be updated with new diagnoses or results
 - Parents have not been contacted by MHRA to follow up Yellow Card report
- Parents also reported suspected ADR to GSK – GSK were not shocked and logged the report and issued a case number. They also sent out a consent form for parents to sign giving them permission to communicate with GP, after this was returned parents heard no more**

Comments

- Doctor told us that it's possible the vaccination caused daughter's illness but there is no way of proving it
- If I had been told initially there was a small chance my daughter's health would never be the same again, and that her teenage years would be completely ruined and robbed from her, I would never ever have given consent for her to be given this Injection. She has very low white blood cells and her lymphocytes are very low. Every time she has a blood test I am scared that she is going to get diagnosed with leukaemia. I have made myself bad over the worry and stress it has caused me, as I try to shield her from my worries and to keep her positive.

Confirmed Diagnoses

- Still undiagnosed
- She has very low white blood cells and her lymphocytes are very low

POTS-type symptoms:

- **Daughter has a lot of the listed POTS-type symptoms but has tested negative for POTS with a tilt table test**

Case: UK30

Brand: **Cervarix** Year of Vaccination: **2009**

- **Refused 2nd & 3rd doses because of adverse reaction to first dose**
- **Symptoms started on the same day of the first dose**

Main Symptoms

- Headache
- Nausea
- Bloating
- Dizziness
- Tachycardia
- Chest Pain
- Weakness
- Fatigue
- Bladder Problems
- Insomnia
- Pain
- Colour changing of hands/feet
- Seen at least 12 doctors since symptoms began
- Told symptoms were psychological by doctors
- Menstrual Problems – irregular
- Vitamin Deficiencies – Vit B12 and Vit D
- Accident & Emergency visit(s) made
- Emergency services called to school on 2 occasions
- Considerable impact on daily living
- Unable to attend full time education
- Allocated place at university as a disabled student and studying over a longer period of time

Reporting to MHRA via Yellow Card System

- Yellow Card only recently submitted by Parent
- Parents were NOT aware of Yellow Card System until recently
- Parents were not informed about Yellow Card System by any medical professionals
- Parents have not been contacted by MHRA to follow up Yellow Card report

Comments

Effect on Daily Living

- My daughter has been unable to attend school and university on a regular basis. She is unable to plan more than one activity in a day and has to come home and rest regularly. Some days and weeks go by when she can't go out at all. She is unable to socialise with friends on a regular basis and has had to give up dancing, her favourite activity. My daughter is 21 years old and takes 17 tablets every day just to get out of bed.

Treatment by Medical Professionals

- Emergency services were called to school on 2 occasions. We were informed that my daughters symptoms were due to stress (she was not stressed and a very bright girl) and panic attacks. Later during her university course when she was admitted to hospital, the paramedic told her off for not seeing her specialist sooner (she is in Leeds and specialist in London). On arrival in A&E the staff wanted to admit her to a cardiac ward. I had to drive from Nottingham to explain her medical condition in detail. One doctor was asking her questions as he had an exam the following day!

Relating to Diagnoses

- My daughter symptoms improve periodically then worsen and her medication has to be adjusted. Last year she had to take a whole semester off her university course due to ill health. My daughter is only able to function on a part-time basis because we have researched and paid for doctors and specialists to help her.

General

- I am not against vaccinations and all three of my children have had all other recommended jabs. I am convinced that my daughters illness was triggered by this vaccination. My daughter was an extremely active and talented dancer hoping to attend a dance college in London at the time of the vaccination.
- I fear that there are many other parents like myself who have been told that their daughters medical conditions could not be linked to this jab, and have simply accepted it as a coincidence. There will also be many people who do not know about the yellow card reporting system and so their daughters symptoms will not be taken into account. The last six years have been a nightmare of worry about my daughters health, the financial burden of getting her some treatment and the detrimental effect her condition has on the rest of my family.

Confirmed Diagnoses

- Still undiagnosed
- Possible Bartonella
- Iron Deficiency
- B12 Deficiency
- Vitamin D Deficiency

POTS-type symptoms: 13/33

Includes:

- fatigue
- dizziness
- cold hands/feet
- fainting
- paresthesia
- Sleep problems
- cognitive problems
- feet change colour on standing

CRPS-type symptoms: 4/13

Includes:

- pins and needles
- intolerance of touch of affected limb
- stiffness in affected joints

- **Never been assessed for POTS/CRPS**
- **Doctor has refused to refer/test for POTS/CRPS**

Case: UK39

Brand: **Cervarix** Year of Vaccination: **2010**

- **Had the 1st and 2nd doses – refused the 3rd dose**
- **Symptoms started the same day as 2nd dose**

Main Symptoms

- Dizziness
- Tight chest
- Nausea
- Muscle spasms
- Urinary urgency
- Palpitations
- Chest pain
- Sickness
- Brain fog
- Clicky joints
- Shortness of breath
- Chronic pain in ribs
- Instability in legs/feet
- Weakness in hands
- Chronic joint pain
- Seen at least 8 healthcare professionals since symptoms began
- At some time told by doctors that symptoms were psychological
- Menstrual problems – very heavy/flooding
- Accident & Emergency visit(s) made
- Admitted to hospital as inpatient
- Considerable impact on daily living
- Unable to attend full time education – had to rely on home tuition and reduced time-table

- **Have felt bullied, threatened or intimidated by doctors when discussing the vaccination in relation to my daughter's illness**

Reporting to MHRA via Yellow Card System

- Yellow Card has been submitted by Parent
- Parents were NOT aware of Yellow Card System at the time of vaccination and onset of symptoms
- Parents have NOT been contacted by MHRA to follow up Yellow Card report

Comments

Effect on Daily Living

- Prior to the vaccination my daughter was a healthy 12 year old who was a competitive swimmer. She is now 18 and has lost her vital teenage years. She has had to stop swimming, she has had to defer university and she has to use a wheelchair.

Treatment by Medical Professionals

- When we've had to visit A&E or my daughter was admitted, we were treated with a total lack of respect and made to feel like time wasters and criminals who were wasting NHS funds.
- At first no-one would listen to us about my daughter's illness but in June this year she was diagnosed with POTS – now they are listening
- We have been told by some doctors that my daughter's case is too complex and they are unable to help

General

- Before consenting I spoke with the nurse at our doctors practice and she told us to go ahead with it as it was in our daughter's best interest to have it done.

Confirmed Diagnoses

- **POTS**
- Raynauds Syndrome
- Hyperventilation Syndrome
- Gastritis

POTS-type symptoms: 24/33

Includes:

- palpitations
- nausea
- fatigue
- dizziness
- chest pain
- Sleep problems
- cognitive problems

CRPS-type symptoms: 13/13

Includes:

- prolonged pain
- pins and needles
- stiffness in affected joints

- **Time to POTS diagnosis: 5 years**

Case: UK41

Brand: **Cervarix** Year of Vaccination: **2009/10**

- **Refused 3rd dose because of adv. reaction to 1st & 2nd doses**
- **Symptoms started 7-14 days after the 1st dose**
- **Had immediate worsening of health after 2nd dose**

Main Symptoms

- Headache
- Nausea
- Dizziness
- Exhaustion
- Blurred vision
- No stamina
- Paresthesia
- Joint pain
- Slow healing
- Tachycardia
- Chest pain
- Weakness
- Pain
- Fever
- Memory probs
- Breathing probs
- Sweating
- Palpitations
- High blood pressure
- Blind spells lasting 2/3 mins
- Foggy thinking
- Sensitive to light/noise
- Cognitive probs
- Sleep probs
- Bruises easily

Worsening of existing health problems:

- Acid reflux
- Abdominal pain
- Childhood constipation

- Seen at least 12 doctors since symptoms began
- Changed GP because he said symptoms were psychological
- Hospital wanting to discharge because they can't find a cause to health problems
- Has been accused of time wasting
- Menstrual Problems – irregular, painful, heavy/flooding
- Not tested for Vitamin/Mineral deficiencies
- Prior to HPV vaccination ADRs to medications experienced – suspected ADR to MMR
- Accident & Emergency visit(s) made
- Considerable impact on daily living
- Able to attend full time education but with regular and prolonged absences - had to redo a year because of absence

Reporting to MHRA via Yellow Card System

- Yellow Card submitted by Parent
- Parents were unaware of Yellow Card System at the time of the vaccination and suspected ADR
- Parents are unaware that Yellow Card reports can and should be updated with new diagnoses and results
- Parents have not been contacted by MHRA to follow up Yellow Card report

Comments

Treatment by Medical Professionals

- Doctors tell me it is impossible that the vaccine has caused my health problems, as the vaccine is completely safe – my concerns are dismissed. My last G.P told me there was nothing wrong with me physically and I was experiencing hidden stress. The only stress I felt was when he wouldn't listen to me. The hospital want to discharge me, but see that I am still attending A&E with documented symptoms, so redo the same tests over and over again, with the same results each time. They don't know what to do with me..

General

- I have suffered greatly for many years with ill health. I was unable to head to university this year with my friends and I struggle to find the energy to leave my bedroom. I struggle to study for my ALevels and can't seem to retain the information I need to know. I am frightened this may never end. I feel alone and isolated from the world.
- My doctor insisted I was suffering exam stress and anxiety, he wanted to put me on Ritalin and mum refused. I was privately assessed and told they didn't believe I was under stress and I had excellent coping mechanisms to deal with any stress and anxiety, we demanded referrals to the hospital. I was referred me to a neurologist for headaches – when my scan ruled out cysts or tumors, I was discharged without seeing the neurologist. After dangerously high blood pressure was discovered, I was referred to the endocrine clinic and cardiac unit. When cardiac tests ruled out structural problems, I was discharged from the cardiac clinic.

Confirmed Diagnoses

- High Blood Pressure
- Other health problems remain undiagnosed

POTS-type symptoms: **28/33**

Includes:

- headaches
- nausea
- fatigue

- dizziness
- paresthesia
- Sleep problems

- tachycardia
- cognitive problems

CRPS-type symptoms: **5/13**

Includes:

- prolonged pain
- Stiffness in affected joints
- changes in colour of affected limbs

- **Never assessed for POTS or CRPS**

- Asked doctor about POTS but was told to stop self diagnosing

Case: UK49

Brand: **Cervarix** Year of Vaccination: **2010/11**

- **Completed all 3 doses, despite symptoms after 1st dose**
- **Symptoms appeared as soon as she had 1st dose**
- **Felt bullied or coerced into having the vaccination – teacher at school did a lesson on why the girls should have it**

Main Symptoms

- Sleepy
- Nausea
- Vertigo
- Heart beat erratic
- Temperature always raised
- Irritable bowel syndrome
- Fatigue
- Brain fog
- Constant viruses
- Anxiety
- Confusion
- Dizziness
- Lack of concentration
- Blood pooling in legs
- Nightmares
- Lack of concentration
- Menstrual problems – long lasting and very painful
- Considerable impact on daily living
- Unable to attend full time education – utilised home tuition and a reduced time-table

Confirmed Diagnoses

- **POTS**
 - CFS/ME
 - Anxiety
- POTS-type symptoms: 22/33
Includes:
- headaches
 - nausea
 - fatigue
 - dizziness
 - weakness
 - sleep problems
 - cognitive problems
- CRPS-type symptoms: 2/13
Includes:
- changes in colour of affected limb(s)
 - abnormal sweating pattern
- **Time to POTS diagnosis: 3½ years**

- **Daughter's school/college threatened me with prison because of her absence during the early onset of her illness**

Reporting to MHRA via Yellow Card System

- Yellow Card has been submitted by Parent
- Parents were NOT aware of Yellow Card System at the time of vaccination and onset of symptoms
- Parents have NOT been contacted by MHRA to follow up Yellow Card report

Comments

Effect on Daily Living

- Before the vaccine daughter was energetic and full of life. She was very academic but only passed five GCSEs - she should have taken 10. She was unable to go to school for some months as could only rest in bed. She had to have home tuition in the end after a fight to get it.
- It has had a devastating effect on not only her life but my life as the parent. My role has become a carer. She lost all her friends and became terribly isolated.

Treatment by Medical Professionals

- Our GP was unaware of POTS but took all the information I gave him onboard. Another mum with a daughter with a similar condition told me the simple sit to stand test with the pulseometer. We saw a recommended cardiologist privately as my daughter could not wait for the NHS appointment – her symptoms were severe.

General

- A cardiologist told us a vaccine can bring on POTS
- Please investigate this vaccine. Something is seriously wrong. My daughter has two long term illnesses CFS and POTS. She has a poor quality of life. She is isolated and lonely. This is not how life should be for a teenage girl. She should be full of life. But every day is now an effort.

Case: UK63

Brand: **Cervarix** Year of Vaccination: **2010**

- **Consultant paediatrician advised against 3rd dose**
- **Symptoms started immediately after the first dose**

Main Symptoms

- Dizziness
- Swollen joints
- Lethargy
- Exhaustion
- Tachycardia
- Frequent urination
- Nosebleeds
- Tingling of face
- Urine infections
- Dangerously low blood sugar
- Headache
- Stiffness in joints
- Nausea
- Heavy limbs
- Weakness
- Pallor
- Sensitive to light
- Earache
- Sore throats
- Inflammation in chest cage
- Feeling faint
- Pain in joints
- Drags leg
- Palpitations
- Tremors/shaking
- Abdominal pain
- Numbness in legs
- Emotional
- Mouth ulcers

Above have largely resolved except for persistent unexplained fatigue

- Seen at least 12 doctors since symptoms began
- Menstrual Problems – light and scant
- **Told symptoms were psychological by healthcare professionals**
- Vitamin Deficiencies – Zinc, iron and calcium deficiencies and vitamin D insufficiency
- A&E visits and admission to hospital as inpatient
- Considerable impact on daily living
- Struggled to attend full time education and had a 3 month absence

Reporting to MHRA via Yellow Card System

- Yellow Card submitted by Parent and GP
- Parents were NOT aware of Yellow Card System at the time of vaccination or onset of symptoms
- **Parents contacted GSK to discuss adverse reaction and were told GSK do not speak to parents, they only speak to medical professionals. Parents were advised to speak to school nurse or GP**

Comments

Treatment by Medical Professionals

- **GP was not aware my daughter had had the vaccination as this information had not been shared between school nurse and GP. When I asked for the brand name, the school nurse insisted it was just “HPV vaccine”.**

Relating to Diagnoses

- GP advised verbally that she had Arthralgia – undiagnosed cause, although there was a possibility it was a side effect from the Cervarix vaccine. He raised a Yellow Card with the MHRA.

General

- I spoke to the school nurse about my concerns prior to consent. She was unable to answer my questions. I was advised it has been trialled in Australia for 7 years. The nurses themselves had given it hundreds of times and it was perfectly safe. I also looked up the NHS website but again there was no mention of any severe side effects or that there had been any death related incidents.
- **Immediately upon receiving the vaccine, September 2010, daughter felt faint, was dizzy and had to sit and wait until she recovered. This was followed by a painful arm and stiffness which lasted several days. The health officials had advised this was to be expected and would be a normal reaction to the vaccination and it was still perfectly safe. She had the second vaccine in November 2010 and had similar symptoms but by Christmas she could hardly walk**
- Prior to vaccination my daughter was a high achieving student and very active. After the vaccination she became stiffer and stiffer until she could hardly walk or open her hands, she was exhausted all the time and in a lot of pain
- I believe my daughter suffered a severe allergic reaction to the HPV vaccine and that the lack of training and understanding of vaccine reactions by medical health professionals seriously delayed her treatment

Confirmed Diagnoses

- Arthralgia
- Chronic Fatigue Syndrome
- Renal Cyst
- Appendicitis with peritonitis (resolved)

POTS-type symptoms: 20/33

Includes:

- headaches
- nausea
- fatigue

- dizziness
- paresthesia
- tachycardia
- Sleep problems

All the above have now largely resolved except unexplained fatigue

CRPS-type symptoms: 4/13

Includes:

- restricted movement of affected limb
- swelling of affected limbs
- stiffness in affected limbs