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## David Wozny DOA 31/07/2015

### PHYSIOTHERAPY Assessment May 2016

I assessed David at home on Friday 29<sup>th</sup> April 2016 over a 2-hour period

David was involved in an RTA on the 31<sup>st</sup> July 2015 – last year,

1. Sustaining profound skull fractures involving: -

- Right Temporal fracture with extradural haematoma and air entry requiring cranioplasty and insertion of pressure bolt
- Left temporal sub dural haematoma
- Sub arachnoid hemorrhage right precentral sulcus
- 1cm contusion right midbrain.
- Multiple small contusions bilateral frontal lobes and left temporal lobe
- Base of skull fracture – Right greater wing of sphenoid extending into left middle cranial fossa and both superior orbital walls
- Right zygomatic fracture
- Multiple fractures bilateral orbits both lateral and medial walls

2. Thoracic injuries including: -

- Fractured right 4<sup>th</sup> rib
- Moderate right anterior pneumothorax
- Extensive right lung contusions
- Right middle lobe lacerations

After admission to Royal Stoke University Hospital David had a prolonged stay on ICU following surgery due to lung injuries and slow weaning from tracheostomy.

Transferred to Haywards Rehabilitation Centre in October

Discharged home 4<sup>th</sup> November 2015

### Prior Occupation Exercise and Mobility

3. Work –

Had own IT business based between home and London = office set up downstairs.

4. Exercise

Independent exerciser – didn't go to the gym with friends or colleagues. Very keen cyclist and gym user 4-5 x per week. Used monitoring programme Endomondo to keep track of targets and workouts. Particular about exercise and competitive with self. CV fitness mainly not weights programmes. Went to the gym alone. Swam. Member of 2 gyms a. N Club and a London gym he went to at lunchtimes. Strong swimmer who found swimming boring. Treadmill boring. Preferred cross trainer 20 minutes, Stepper 20 minutes then 10 minutes rowing

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## David Wozny Physiotherapy assessment

### Communication and Memory

5. Was communicative and compliant and comprehended the majority of requested tasks – Physical demonstration was needed on more complicated activities
6. David reported if has a long conversation or talking for a long time speech gets tired and words slur. Worse if weather is cold.
7. Speech had some slight slurring that increased slightly over time however when asked to rapidly open and close hands as he was explaining what it felt like in the left hand while performing the movement he talked gobbledygook – which he didn't realise until the video was played back to him.
8. Impetuous at times - Would set off before full explanation given but ok with correction.
9. David consistently went to the computer to find information before attempting to recall. Although almost recalled how I'd liked my tea
10. On four occasions throughout the assessment David stated he thought people would look at him and wonder what was wrong with him – explained each time that different people have different perspectives depending on their experience.
11. When David's wide based stance was described and limitations in neck range David had to see pictures to understand this was not as he perceived as normal.

### General Health

12. Had bilateral wax buildup in ears managed by syringing twice yearly prior to accident. Recent ENT referral with resolution at the moment.
13. Is not as confident re bladder and bowel continence as was prior to accident. Urgency bowel continence 8.15 every am.
14. 10 years prior to accident had sciatica which was resolved by lumbar vertebral disc being injected. No re occurrence from that time.
15. Has panic attacks about whether he has locked the door. Neuropsychologist assisting with strategies to manage this.
16. Doesn't run or try to run. Very cautious with self. Careful up and down kerbs etc. Worries about falling Down, how he would land and has a fear of what could happen and how he would cope.
17. Mood swings – thinks it has had 2 good days all is ok. If has bad days, then low in mood and more of the moment. Keeping mood scores = Ruth suggested daily diary. 1 – 4. 1 if feeling excellent 4 is worst. Yesterday and Wednesday 3 felt really bad/ Assessment day was a 1.
18. Had an episode of Hands feet and lips swelling. No cause. Day after discharge home the day after a Maxillary Facial appointment.

### Altered sensation Pain/Discomfort

19. Tingling left hand. Thumb and first 2 fingers. C6/7 dermatomes Over the last ¾ weeks Losing dexterity in left hand associated with the tingling. Cannot manipulate coins and fine dexterity and function affected. Hasn't the confidence to keep hold – clumsy – fingers fumbly. Had nerve conduction testing and MRI scan. 2 ½ months ago. Sometimes intensity 9/10 has had to leave friends to go upstairs and lie down. Majority of time 4/10
20. When puts head down feels an ache and shift' and a 'rush of blood' through the middle of the head feeling inside head as flexes head on neck and bends trunk. Doesn't like putting head down. This eases as soon as he raises head. Crouches instead of bending at the waist. Observed this occurring consistently repeatedly at the same point of movement throughout assessment.
21. Hasn't been able to carry 2 cups of tea upstairs since discharge. Left hand unsteady.
22. Bilateral anterior shins tingling dorsum of feet. Touching or rubbing skin doesn't make any difference. Medication Pregabalin 2/52 hasn't made any difference. Worse at night in bed 3/10
23. Has dry mouth problems with swallowing. Struggles to talk and eat. Has to have liquid and drinks with every mouthful to wash it down. Has lot of sauces with food to moisten it. Saw ENT -Not resolvable
24. Occasional stabbing pain right lateral kneecap on squatting

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25. Head - feels 'Fuzzy' as if filled with insulation. Tightens inside head makes it harder to navigate through the task. Becomes disorientated then has to check and double check has done the task. Occurs when anticipating a task, when multi-tasking, planning or doing a non-automotive task. If it becomes too much goes and lies down. Rest doesn't make it any easier. Eases when task completed

Posture Alignment and Balance

- 26. Head anterior shift to trunk reduced cervical lordosis. Increased mid thoracic flexion.
- 27. Wide based stance 12 "between feet – realised when corrected but then felt unbalanced like 'a pencil on a point'. Was observed to have increased sway in static standing.
- 28. Very wavy of head positioning in space. Holds head aligned with trunk face forwards on forward flexion.
- 29. Trunk and lower limbs slightly ataxic when base less wide. Able to recover dynamic shift in balance.



Co-ordination

30. Reduced rapid reciprocal movement supinating and pronating, opening and closing fingers and running on the spot. Unable to talk coherently when performing physical task that required effort and thought.

Gait

- 31. Apparently Normal gait when walking forwards. Symmetrical right swing through for toe placing.
- 32. Wide based heel walk
- 33. Walking backward warily with short stride length.
- 34. Reciprocal movement up and downstairs can initiate and attempt running upstairs.
- 35. Independent and safe on/off floor and all movements.

Exercise Tolerance

36. No problems during assessment. No problems reported with sleep hygiene.

Range of Movement ROM and Strength

All apparently normal apart from ROM

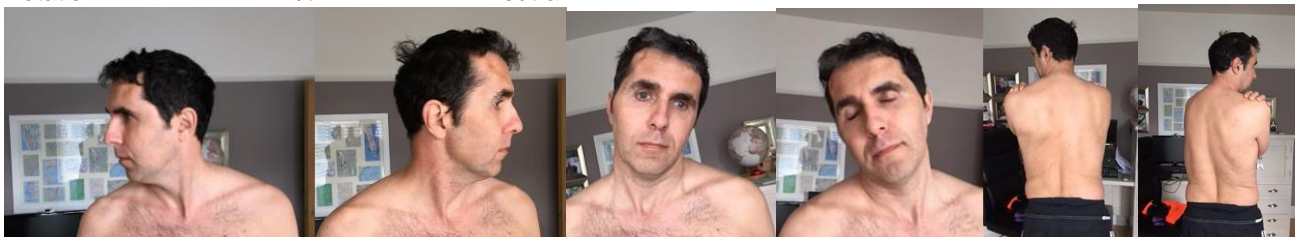
35. Neck

Extension	3/4	
Flexion	NR	
	<u>Right</u>	<u>Left</u>
Side flexion	1/4	neutral
Rotation	1/2	¼

Head and neck side flexion and rotation very limited.

36. Trunk

Rotation	¼	Neutral
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Strength Oxford Scale

All apparently normal apart from: -

37.Hand

Left hand reduced fine and power grip grade 3

38.Feet

Right big toe dorsiflexion 0.

Unable to actively extend or move into dorsiflexion. Adduction/ abduction and lateral shift as normal. Has to put foot in shoe or croc and then actively push it down from the gap at the side or from the top.

No specific nerve root origin

39. Medication

<u>DRUG NAME</u>	<u>REASON FOR TAKING</u>	<u>DOSE</u>	<u>TIMES TAKEN</u>
Propranolol	doesn't know	40mg	am & nocte
Pregabalin	Altered sensation BP and Heart Rate?	75mg	" "
Neurofen	anti inflamm	200mg	as required
Paracetamol	pain relief	400mg	as required

Hasn't taken Neurofen or paracetamol since discharge?

Conclusions

40. Wide based slightly ataxic gait. Stays within known walking distance locations as cautious and wary when out and about. Fearful of accident
41. Right big toe inability to dorsiflex and move actively could increase risk of tripping when stepping up onto a step walking and running. Over pronation and abduction bilateral feet left >right
42. Reduced range of movement head neck and trunk with C6/7 dermatome.
43. Reduced left hand power with loss of gross power and fine function, clumsiness and 'fumbling'
44. Pain and altered sensation significantly impacting on exercise tolerance particularly in multi tasking environment
45. Reduced exercise ability power and strength comparative to prior lifestyle – David had enjoyed monitoring CV exercise and maintaining and improving Cardiovascular fitness
46. Head position in space problem – possible vestibular effect.
47. Poor memory and inability to recall information requiring use of IT assistance to function.

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### Physiotherapy Recommendations

48. Physiotherapy Mobilisations and intervention to assess available range accessible in head, neck and thorax and impact on left hand. – 6 specific interventions
49. After no. 1 then Vestibular assessment and exercises to increase orientation in space and balance
50. Immediate Gym membership including pool access to enable: -
51. Guidelined Cardiovascular (CV) programme – possibly using iPad/tablet and previously used Endomondo or other system that would enable monitoring for David's personal evaluation of his physical abilities.
52. Use of a Support worker with high fitness and Personal Training qualifications to support initial re introduction, carryover into gym and pool environment and implementation of monitoring system.
53. Referral to Podiatrist skilled in biomechanical assessment and orthotic prescription for foot alignment correction and big toe support

### Initial Physiotherapy intervention

54. 6 x 1hour weekly session related to no. 42,43,48 & 49.
55. 6 x 1 & 1/2 weekly sessions in gym environment to initialize, teach and monitor exercise tolerance and ability on dry land and pool - write appropriate guidelines and look at monitoring system