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Assessment of Elderly Drivers - The Sweat Test: Is your patient safe to drive? Concurrent Workshop Repeated

Sunday, 12 June 2011

Start 8:30am

Start 9:25am

Duration: 50mins

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Picasso

Picasso

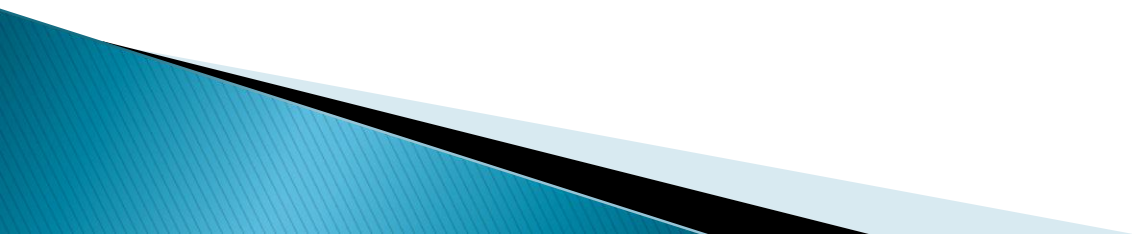
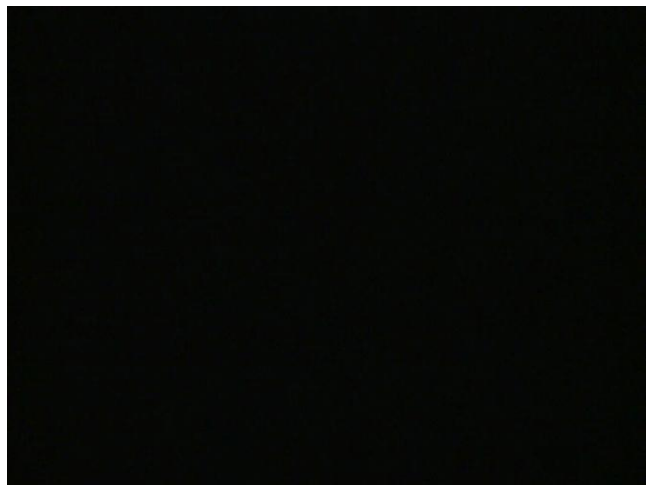
 **Rotorua GP CME 2011**
New Zealand Medical Association

General Practice Conference & Medical Exhibition



09-12 June 2011 | Energy Events Centre | Rotorua

The Sweat Test: Is your patient safe to drive?



“ROAD MAYHEM” Driver and passenger died and two others were injured in four-car crash when an elderly driver with a medical condition went the wrong way on an Auckland motorway



Did you know?

- ▶ Road traffic crashes are the leading cause of injury-related deaths among 65 – 74 yr olds and 2nd leading cause among 75 – 85 yr olds
- ▶ People over 75 have 4 x the risk of dying per kilometre travelled; this is the highest of all age groups
- ▶ By 2030 the number of persons over 70 yrs old is predicted to triple

Did you know (contd)?

- ▶ The population is ageing; the effect of medications, alcohol, fatigue, inattention, frailty is resulting in road crashes
- ▶ By 2026 the number of people in NZ with dementia will have doubled
- ▶ Most drowsy drivers who die are older; most accidents occur between 2 – 5pm

Risk factors need to be managed

DRIVING.....

Driving is a key role in everyday life

Contributes to the older person's:

- Self esteem
- Independence
- Involvement in social and avocational activities



DRIVING.....

An intrinsically complex task which combines well learned routines with the ability to respond flexibly and safely to unexpected events.



Physical components of driving:

- ✓ Strength
- ✓ Coordination
- ✓ Muscle tone
- ✓ Range of motion
- ✓ Sensation
- ✓ Balance



Visual components of driving :

Age related decline in:

- ▶ Dynamic & static visual acuity
- ▶ Visual field
- ▶ Resistance to glare
- ▶ Contrast sensitivity
- ▶ Visual processing speed
- ▶ Visual search
- ▶ Low light sensitivity
- ▶ Depth perception

Also development of cataracts



Cognitive components of driving:

- ▶ Reaction times
- ▶ Eye–hand coordination
- ▶ Divided attention
- ▶ Complex attention
- ▶ Planning
- ▶ Concentration
- ▶ Decision making
- ▶ Impulsivity
- ▶ Insight



How is driving affected?

<i>Deficit</i>	<i>Characteristics</i>	<i>Effects on Driving</i>
1. Musculo-skeletal impairment	❑ Restricted neck or trunk rotation ❑ Upper and lower limb reduced range of movement ❑ Impaired sitting posture/balance ❑ Loss/paralysis of limb	❑ Unable to check for blind spot ❑ Limited line of vision ❑ Difficulty operating primary and secondary controls

How is driving affected?

<i>Deficit</i>	<i>Characteristics</i>	<i>Effects on Driving</i>
2. Poor Vision	☐ Reduced visual acuity ☐ Visual field loss ☐ Monocular vision ☐ Spatial relationships	☐ Poor positioning on road ☐ Limited awareness of traffic environment ☐ Poor judgement of distances and speeds

How is driving affected?

<i>Deficit</i>	<i>Characteristics</i>	<i>Effects on Driving</i>
3. Slowed information processing	☐ Unable to plan ahead in a timely manner ☐ Unable to process traffic environment	☐ Late braking ☐ Slow changing gears ☐ Slow response to potential hazards

How is driving affected?

<i>Deficit</i>	<i>Characteristics</i>	<i>Effects on Driving</i>
4. Reduced selective attention	☐ Inability to attend to task at hand whilst blocking out other less important Information ☐ Distractibility ☐ Fluctuating attention ☐ Deterioration after 10 –20 minutes	☐ Distracted by unimportant information ☐ Reduced ability to multi task ☐ Poor decision making at intersections ☐ Impaired vehicular control ☐ Late braking

How is driving affected?

<i>Deficit</i>	<i>Characteristics</i>	<i>Effects on Driving</i>
Impulsivity	❑ Carries out actions without thinking them through and considering consequences	❑ Rushes manoeuvres ❑ Can be dangerous in complex situations ❑ Disregard of own and others safety

How is driving affected?

<i>Deficit</i>	<i>Characteristics</i>	<i>Effects on Driving</i>
5. Reduced insight	☐ Unaware of difficulties ☐ Continues to measure own performance as per pre-condition ☐ Does not accept need for assessment	☐ Blames all faults on other drivers ☐ Unable to self regulate and modify behaviour ☐ Takes risks

Is your patient medically fit to drive?

- ▶ Not an easy decision / multiple factors to consider
- ▶ Risk vs independence

‘Damned if you do, damned if you don’t!’



Key considerations:

- ▶ Legal & ethical obligation to ensure safety of other road users as well as your patient
- ▶ Refer to Medical Aspects of Fitness to Drive guide when examining patients
- ▶ Advise NZTA if patient continues to drive when advised not to

Key considerations(contd):

- Involve/ask family
- GP is an integral part of the driver licensing system
- The issue may not be the particular medical condition but the risk factors associated with it

Key considerations (contd):

- Type of licence and type of driving
- Effects of medication
- Multiple medical conditions
- Know when to refer to specialist OT

*“Driving is a life-long commitment,
requiring life-long learning”*

“ROAD MAYHEM” Driver and passenger died and two others were injured in four-car crash when an elderly driver with a medical condition went the wrong way on an Auckland motorway



Tools & Strategies

- ▶ Reinforce self-regulatory behaviour
- ▶ Encourage your patient to look ahead and consider that there will be a time when he/she can no longer drive
- ▶ MMSE
- ▶ Addenbrook
- ▶ Simard MD
- ▶ Trail B

“Driving is a privilege, not a right”

Referring for Specialist OT assessment:

- ▶ Sooner rather than later
 - ▶ Retain driving independence with appropriate vehicle modification
 - ▶ Confirm ability to retain license subject to limitations or conditions
 - ▶ Obtain independent opinion supported by clinical evidence
 - ▶ Maintain your GP/patient relationship
 - ▶ Review after change in treatment/medication/medical status
- 

Is this your patient?

I've sure gotten old!

I've had two bypass surgeries, a hip replacement,
New knees, fought prostate cancer and diabetes.

I'm half blind,

Can't hear anything quieter than a jet engine,

Take 40 different medications that

Make me dizzy, winded, and subject to blackouts.

Have bouts with dementia;

Have poor circulation;

Hardly feel my hands anymore.

Can't remember if I'm 85 or 92;

Have lost my friends. But, thank God,

I still have my driver's licence!

The Sweat Test

- ▶ What's your gut feeling?
- ▶ Do you want your children/grandchildren travelling with your patient?
- ▶ Is this who you tooted at the other day?

Driving and your patient

- Promote road safety
- Make sure your patient is not the next statistic
- Take responsibility
 - Manage risk