FIND YOUR STRENGTH IN NUMBERS
Kaiser Permanente Diabetes Wellness Day
Saturday, October 22, 2016

Neurological Complications of Diabetes
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The Nervous System
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How the Nerves Work
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Definition
Junction between terminal branch of nerve fiber and muscle fiber
The Map of the Brain
Diabetes

• Sugars are an important energy source for the body and the brain
• The sugar levels in your body have to be in very good control
  • High sugar levels are bad
  • Low sugar levels are bad
• Poorly controlled blood sugar levels damage the parts of the body including the brain, spinal cord and the nerves
• The damage starts with the smallest nerves (nerves in your feet)
• This is called Neuropathy (nerve damage)
Diabetic Neuropathy

• Diabetes is the number 1 cause neuropathy in the US
• 10-100% of Diabetics will have neuropathy
• PCP and Diabetes doctors monitor your blood sugars closely
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Hgba1c
Types of Diabetic Neuropathies

- Cranial neuropathies (CN III, CN IV, CN V, CN VI, CN VII)
- Entrapment Neuropathies (Carpal Tunnel Syndrome)
- Peripheral Neuropathies
- Autonomic Neuropathies
- Polyradiculopathies (Thoracic and lumbar)
- Diabetic Amyotrophy
Types of Diabetic Neuropathies

- Cranial neuropathies (CN III, CN IV, CN V, CN VI, CN VII)
- Entrapment Neuropathies (Carpal Tunnel Syndrome)
- Peripheral Neuropathies (distal symmetric)
- Autonomic Neuropathies
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- Diabetic Amyotrophy

All of these can be prevented by regular exercising, diet control and weight loss and good glycemic control
Diabetes and Stroke

• Stroke is a common cause of death and disability
• Stroke damages the brain irreversibly
• Our aim is to prevent strokes
• The following are known causes of stroke
  • Age above 60
  • Hypertension
  • Cholesterol
  • Diabetes
  • Men
Arteries of the Brain
Strokes can damage the brain
Treatment

- Prevention
- Prevention
- Prevention
- Bringing blood sugars under control
- Goal is to bring hgba1c below 7 and ideally below 6.5
Thank you!
Questions?