

# Hypogonadism and Other Endocrine Side Effects of Opioid Therapy in Patients with Chronic Non-Cancer Pain

Pat Morley-Forster MD, FRCPC  
University of Western Ontario

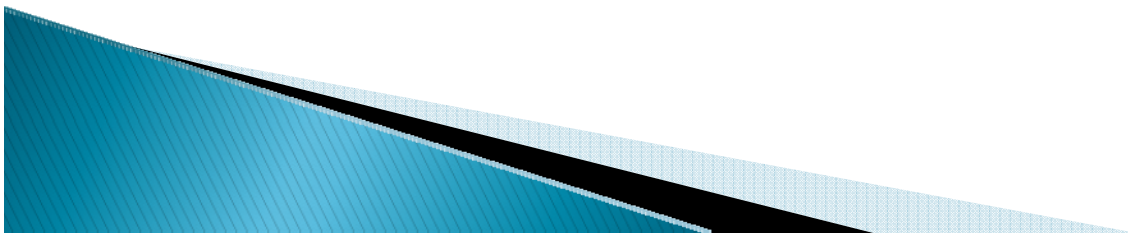
*“[Opium] has kept, and does now keep down the population: the women have fewer children than those of other countries... the feeble opium-smokers of Assam... are more effeminate than women.”*

- Charles Alexander Bruce, “Report on the Manufacture of Tea and on the extent and produce of the tea plantations in Assam,” Calcutta, 1839.



- ▶ Plasma testosterone levels and libido were noted to be subnormal in male heroin addicts maintained on methadone in 1960s

- *Azizi, Steroids 1973*

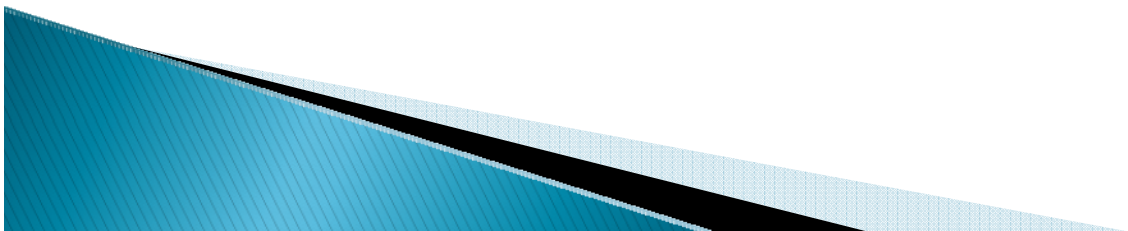


# Rx for MSK Pain 1980– 2000

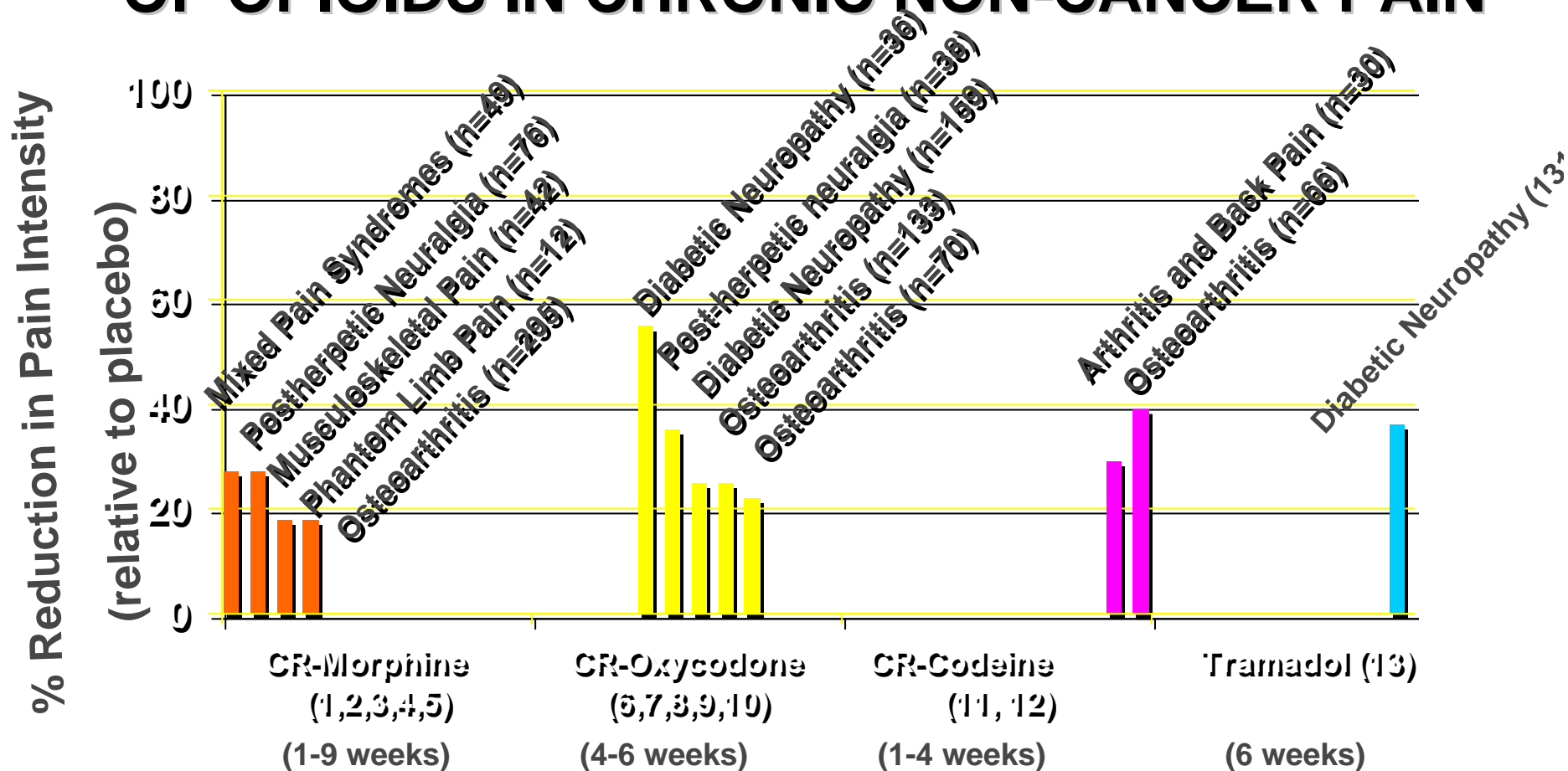
Use of potent opioids for chronic MSK Pain

1980	2%
2000	9%

*Caudill-Slosberg MA, Pain, 2004*



# DOUBLE-BLIND PLACEBO CONTROLLED STUDIES OF OPIOIDS IN CHRONIC NON-CANCER PAIN

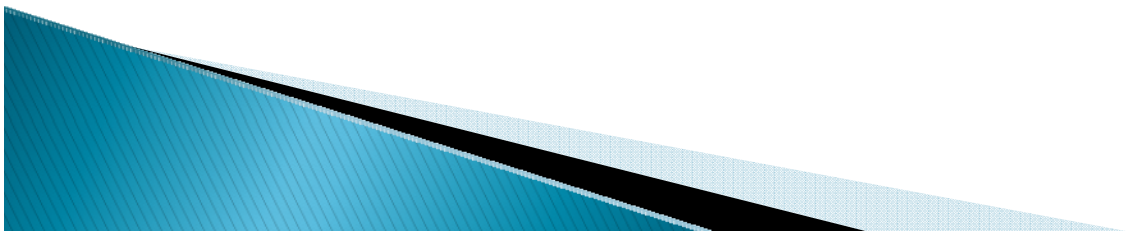


1. Maier et al Pain 2002; 2. Raja et al Neurol 2002; 3. Moulin et al Lancet 1996; 4. Huse et al Pain 2001; 5. Caldwell et al JPSM 2002; 6. Watson et al Pain 2003; 7. Watson et al Neurol 1998; 8. Gimbel et al Neurol 2005; 9. Roth et al Arch Intern Med 2000; 10. Caldwell et al Rheum 1999; 11. Arkin et al Pain 1995; 12. Peloso et al Rheum 2000; 13. Harati et al Neurology 1998.

# Potent opioids for Chronic MSK Pain–Are we flying blind?

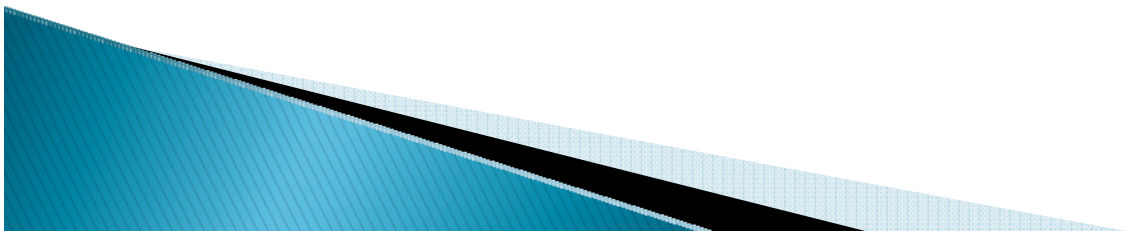
- ▶ Although many benefit from opioids, we do not have adequate knowledge of the risks
- ▶ Long-term , large-scale outcome studies are needed

• *Editorial, Von Korff,2004*

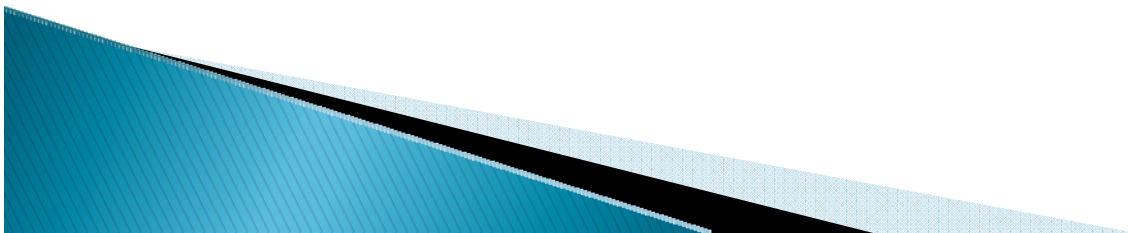


▶ What do you think is the percentage of patients on long-term opioids who suffer from hypogonadism?

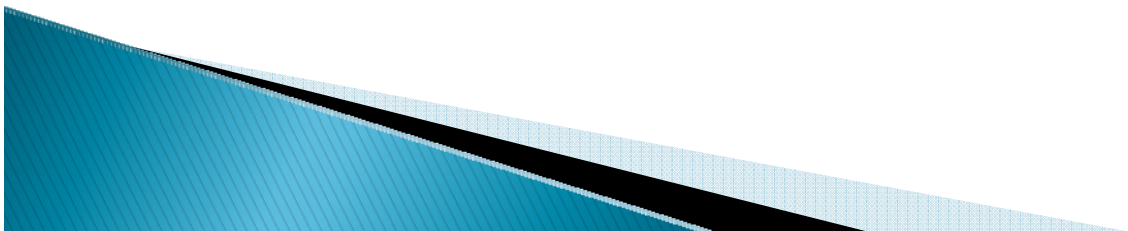
▶ 10%      20%      40%      > 50%



- ▶ How many routinely test for gonadal dysfunction in patients on opioids?

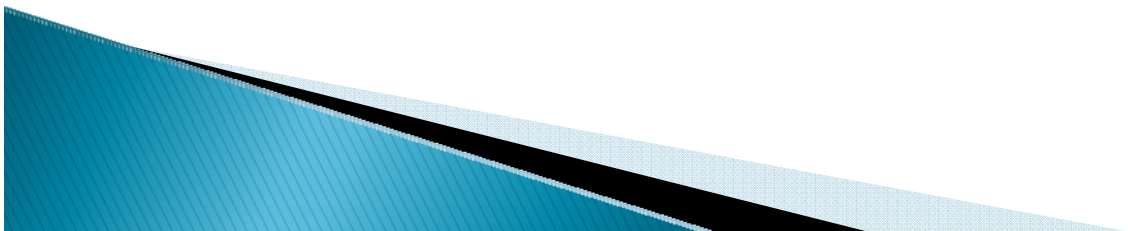


- ▶ How many discuss decreased testosterone and/or decreased bone density as a potential risk factor of opioid therapy?



# Case Presentation

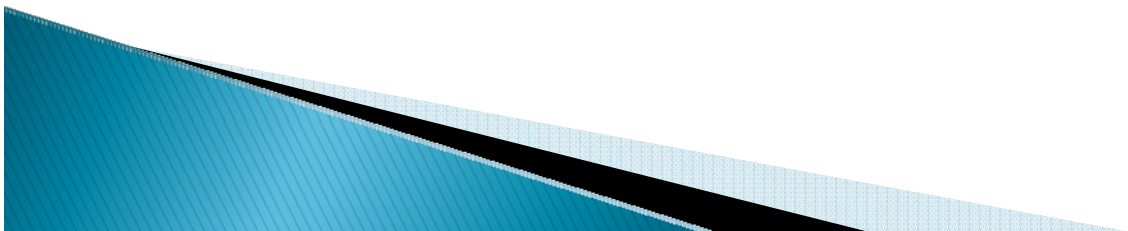
- ▶ 35 y o male factory worker
- ▶ Smoker, moderately overweight
- ▶ Persistent back/leg pain post-disc herniation
- ▶ Not a surgical candidate
- ▶ All conservative remedies have failed
- ▶ On MS Contin 30 mg BID x 1 year



# Case Presentation

He complains of:

- ▶ increasing fatigue and lack of drive
- ▶ Decreased libido



# Differential Diagnosis

- ▶ Depression
- ▶ Deconditioning
- ▶ Sleep Disruption
- ▶ Hypogonadism
- ▶ Opioid Side Effect

