

Notes by Joan B. Martin MD

Please contact me with any corrections

drjoanbmartin@yahoo.com or joan.b.martin@kp.org

EFFECT OF 655 nm DIODE LASER ON DOG SPERM MOTILITY

Dr. Josepha Rigau, Spain

- Sperm motility depends on energy consumption
- Laser increases sperm energy
- 655 nm continuous wave diode laser, output power 20-200 mW????
- Changed the J/cm² from 4 to 6 to 10
- Research: four 6 y/o Beagle dogs
- 7 parameters measured for motility
- Also evaluating with hyposmotic swelling test (measure of sperm quality)
- L-Lactate metabolic capacity

Results:

- Difference between control and all the laser groups; laser improved all the parameters
- The changes were not significant statistically

Changes depended on the maturation stage and differentiation, and species

Conclusions:

- Laser with 655
- Improved motility, lasted 45 minutes
- Increased the energy level of the sperm