

Name:



ANDROLOGY CAMPUS 8 -10 NOVEMBER 2007

POST COURSE TEST

- 1) **What is the percentage of azoospermia found in men treated with high dose testosterone only?**
 - a. Rates of azoospermia 60% (Caucasian) to 90 % (Asian) men
 - b. Rates of azoospermia 90% (Caucasian) to 60 % (Asian) men
 - c. Rates of azoospermia 100% (both Caucasian and Asian) men

- 2) **The testicular dysgenesis syndrome is a term used for the combination of the following clinical problems**
 - a. Hypospadias - undescended testis - testis cancer - impaired spermatogenesis
 - b. Phimosis -undescended testis - testis cancer - impaired spermatogenesis
 - c. Hypospadias - undescended testis - prostate cancer - impaired spermatogenesis
 - d. Hypospadias - gynaecomastia - testis cancer - impaired spermatogenesis

- 3) **Male ageing is characterized by a(n):**
 - a. More than % 50 decrease of sperm concentration
 - b. Decrease of serum sex hormone binding globulin concentrations
 - c. Increase of both sperm volume and motility
 - d. None of the above

- 4) **The most important prognostic factor(s) influencing the outcome of microsurgery for obstructive male infertility are:**
 - a. The female age and the length of the obstructive interval
 - b. The intra-operative sperm quality
 - c. The cause of the male genital obstruction
 - d. The presence of sperm auto-antibodies

- 5) **Which condition is not associated with obstructive male infertility?**
 - a. Congenital bilateral absence of the vas deferens (CBAVD)
 - b. Young syndrome
 - c. Mullerian cyst
 - d. Kartagener`s syndrome

- 6) **Cigarette smoking:**
 - a. Has a negative impact on female fertility but not on semen quality
 - b. Has a negative impact on semen quality but not on female fertility
 - c. Has a negative impact both on female fertility and semen quality
 - d. Has no impact on male or female fertility

7) Obesity:

- a. Has a negative impact both on female fertility and semen quality
- b. Has no impact on male or female fertility
- c. A negative impact on semen quality but not on female fertility
- d. As a negative impact on female fertility but not on semen quality

8) Robust laboratory methods often include duplicate counting with comparison. Why is that important?

- a. To decrease the risk for random errors
- b. To increase lab manager's control of staff members
- c. This is the Internal Quality Control
- d. To replace External Quality Assessment
- e. To get good results even if fewer than 100 sperm are assessed

9) You read an interesting publication about a new decision limit for rapid sperm motility that appears to revolutionize the results from the type ART you practice in your centre. What do you need to know before you implement the decision limit in your centre?

- a. Do the two labs (your centre's and the publishing centre's) use the same type of microscopes?
- b. Do the two labs (your centre's and the publishing centre's) use equivalent methods and criteria for motility assessments?
- c. Do the two labs (your centre's and the publishing centre's) use the same type of pipettes?
- d. What is the uncertainty of your laboratory's methods around the proposed decision limit?
- e. Both alternative b and d

10) What is untrue about semen?

- a. Sperm and prostatic fluid is expelled in the first ejaculate fractions
- b. The sperm chromatin is unaffected by time in semen
- c. Duration and quality of stimulation appears to influence the "quality" of semen
- d. There are no regulatory functions in semen to control for instance osmolarity and pH
- e. Sperm motility often decreases with longer time in semen

11) What is worst method for assessing semen volume?

- a. Weighing the sample (and assuming a density of 1 g/ml)
- b. Measuring the volume in a graduated measuring cylinder used as collection vessel
- c. Transfer into a pipette or syringe

12) Why is not necessary to use sperm donor in a HIV serodiscordant couples wishing to conceive when a male partner is HIV positive?

- a. Because sperm wash with nested PCR is a reliable method to use in the assisted reproduction techniques
- b. Because HIV is not transmitted via semen
- c. Because the female partner can be vaccinated before IUI

13) IMSI technique requires sperm selection of the basis of:

- a. Morphological parameters
- b. Biochemical parameters
- c. Motility

14) PICSI technique requires sperm selection of the basis of:

- a. Morphological parameters
- b. Biochemical parameters
- c. Motility

15) Your local laboratory produces the following semen analysis results for one of your patients who has consulted you about delayed fertility. The results are as follows:

Semen volume - 0.3mls Sperm concentration - No sperm seen, Fructose Test not available in laboratory

In these circumstances there are a number of actions you could take. One of the following actions is False. Which one of the following actions is false:

- a. Test the female partner for CF mutations
- b. Advise the man that there is no chance of fatherhood
- c. Arrange for the laboratory to examine a post orgasm (post ejaculation) sample of voided urine to try to diagnose retrograde ejaculation.
- d. Re-examine the man's Scrotum and testicles
- e. Arrange for a transrectal ultrasound to try to diagnose a Mullerian Duct Cyst

16) Testicular size can be measured with an orchimeter (orchidometer). The most widely used orchimeter is the Praader orchimeter which was developed for use in children and adolescents. The original Praader orchimeter was modified by the World Health Organisation to include larger size beads so that the device can be used for adults. Also testicular size can be measured with ultrasound. Only one of the following statements about testicular size is true:

- a. Small hard testicles are the usual finding in men with low sperm concentrations
- b. Small testicles are usually associated with reduction in the number of Leydig cells
- c. The right testicle is usually smaller than the left
- d. The seminiferous tubules are the biggest component of the volume of the testicle
- e. Testicular tumors always cause an increase in testicular size

17) All but one of the following chromosomal or genetic compliments are causes of male infertility. Which is the false answer?

- a. 47XXY
- b. 46XX
- c. Mutations of the CFTR (Cystic Fibrosis Transmembrane Regulator Gene)
- d. Mutations of the KALIG-1 gene on Xp22.3
- e. Mutations of the androgen receptor gene located on Xq 11-12

18) Which feature is most important for predicting ejaculatory success by PVS in men with spinal cord injury?

- a. Voltage of vibrator
- b. Amperage of vibrator
- c. Amplitude of vibrator

19) A patient with which level of spinal cord injury is at greatest risk for autonomic dysreflexia and should be pretreated with nifedipine prior to administration of PVS?

- a. T4
- b. T8
- c. T12

20) Which semen parameter is most abnormal in men with spinal cord injury?

- a. Sperm concentration
- b. Sperm motility
- c. Semen pH

21) Androgens administration in eugonadic male:

- a. Improves erection
- b. Increases libido
- c. Improves ejaculatory control
- d. Worsens erection
- e. Increases prostate

22) Can cause HSDD:

- a. Erectile dysfunction
- b. Hypogonadism
- c. Hypothyroidism
- d. Hyperprolactinemia
- e. All the previous

23) Which one among the following investigations is necessary for diagnosing HSDD?

- a. Blood chemistry + testosterone
- b. Dynamic penile Doppler
- c. Cavernometry
- d. Visual sexual stimulation
- e. Intracavernous injection (ICI)

24) Which Use of Semen Cryopreservation is NOT routinely offered in most Regional Fertility Centres?

- a. Pre chemotherapy
- b. ART using patient semen
- c. ART using donor semen
- d. Pre vasectomy

25) Cryoinjury is observed in:

- a. Chromosomal changes
- b. Fertile mens' ejaculated sperm DNA
- c. Quantitative motility changes
- d. Damage to all organelles

26) The most important factor in preventing cryoinjury is:

- a. Fertile status of semen
- b. Addition of cryoprotectant
- c. Programmable freezing
- d. Thawing procedure

27) What objectives have been already achieved by the research on artificial gametes?

- a. Morphological structure similar to natural gametes
- b. Cell markers corresponding to natural gametes
- c. Functionality
- d. All above

28) The EU Tissues and Cell Directive applies to:

- a. All fertility units in all 27 EU member states
- b. All fertility units in the former 15 EU member states and from 2010 in the other EU member states
- c. only for import and export of EU member states with US, China, Japan, Australia

29) Intrauterine insemination falls under the EU Tissues and Cell Directive:

- a. Only when using non-partner donor sperm
- b. Both for partner and non-partner donation
- c. Only for patients with HIV or Hepatitis B or C

30) The EU Tissues and Cell Directive specifies a specific air quality for processing reproductive cells and tissues (GMP grade A in grade D background). A less stringent environment may be acceptable:

- a. Clearly always for IUI
- b. Never for ICSI
- c. When documented and validated for the intended use

31) The following are not risks of IVF:

- a. Pleural effusions
- b. Damage to the internal iliac vessels
- c. Congenital fetal abnormality
- d. Ovarian abscess
- e. Ectopic pregnancy

32) The following factors do not significantly affect outcome after IVF:

- a. Female age
- b. Male age
- c. Hydrosalpinges
- d. Female obesity
- e. Smoking

33) The most efficient method for sperm retrieval in non-obstructive azoospermia is:

- a. TEFNA
- b. TESE
- c. Epididymal aspiration
- d. None of the above

34) Micro TESE in comparison with conventional TESE is:

- a. More efficient in terms of sperm retrieval.
- b. Safer with less side effects.
- c. With a higher but not statistically significant sperm retrieval rate.
- d. Causes many intra-testicular hemorrhages

35) Repeated TESE:

- a. Should be done after intervals of 6 months
- b. Gives a 98% sperm retrieval rate in the repeated cases
- c. Does not effect the testicular tissue and thus can be performed to an unlimited number of times
- d. leads to pregnancies also in high order of repeated trials

36) The indications for ICSI include:

- a. Mild male factor infertility
- b. Unexplained infertility
- c. Previous fertilisation failure
- d. Pre-implantation genetic diagnosis
- e. Recurrent miscarriage

37) Fertilisation rates after ICSI for non-male factor infertility are compared to conventional.

- a. Much higher
- b. The same
- c. Lower
- d. Much lower

38) ROS are:

- a. Exclusively formed in sperm cells
- b. Exclusively formed upon passage of sperm cells through the epididymis
- c. Eliminated from sperm through the leucocytes
- d. Necessary in low concentrations for a normal sperm cell function

39) The TUNEL assay:

- a. Shows a positive correlation with pregnancy rates
- b. Shows a positive correlation with embryo quality and development
- c. Detects double strand nuclear fragmentation
- d. Is less often positive in OAT patients

40) children that need to undergo a sterilizing cancer treatment

- a. can benefit from hormonal protection
- b. can bank testicular tissue
- c. can bank sperm