

**398\* An audit of sexual health awareness in adult cystic fibrosis patients**

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**Aim:** To assess the effectiveness of the current sexual health educational service by questioning adult CF patients to establish their level of understanding.

**Method:** All adult patients attending a regional CF Centre were asked to complete a confidential questionnaire covering issues related to sexual health.

**Results:** 31 patients completed questionnaires, 15 females and 16 males. When asked how CF affects fertility in men; 31% of males and 33% of females thought it reduced fertility, 63% of males and 40% of females thought they were nearly always infertile and 6% of males and 27% of females did not know. When asked how CF affects fertility in women; 19% of males and 27% of females thought they had normal fertility, 63% of males and 60% of females thought they had reduced fertility, 6% of males thought they were nearly always infertile and 12% of males and 13% of females did not know. The majority of females (67%) wanted to discuss sexual health with a female member of the CF team. Females thought sexual health should be discussed at 10 to 16 years and males at puberty to 18 years. The majority of males (75%) and females (73%) thought that it was the responsibility of the CF team to educate patients on these issues.

**Conclusion:** This audit has highlighted a general lack of understanding of the impact of CF on reproductive health. Educating patients and their parents about sexual health and family planning should become part of routine care and start at an age appropriate for the patient. The discussions should involve a member of the CF team with whom the patient has a trusting relationship.

**399\* Prevalence of erectile dysfunction in cystic fibrosis**

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**Introduction:** Erectile Dysfunction (ED) has an important negative impact on self-confidence, interpersonal relationships and male quality of life. The prevalence of ED increases with age and is possible in CF with increasing life expectancy but its prevalence in CF has never been sought.

**Aim:** To determine the prevalence of ED in our CF centre.

**Methods:** Anonymous self-reporting validated questionnaire using the International Index of Erectile Function (IIEF-5) was sent out to all male CF patients >20 years of age. This identifies 5 domains of sexual health (erectile confidence, erection firmness, maintenance frequency, maintenance ability and intercourse satisfaction). The maximum score is 25; ED is classified into 5 severity levels; none (22–25), mild (17–21), mild to moderate (12–16), moderate (8–11) and severe (5–7).

**Results:** 109 questionnaires were sent out with 32 responses (29%). ED was found in 9 patients (28%). Of these 7 (78%) had mild ED; majority (43%) attributed the lack of erectile confidence being the main cause for ED; but none had the inability to maintain an erection. 2 patients (22%) had severe ED and they struggled with all domains of sexual health.

**Discussion:** This survey showed that ED is prevalent in the male CF cohort. The poor response rate may have underestimated its true prevalence. The high proportion of patients who lack erectile confidence indicates a possible psychological component. However, the aetiology may be multi-factorial and could be secondary to chronic infection/inflammation, diabetes, medication side-effects and hormonal imbalance. A more detailed study is warranted to investigate the exact factors and manifestation of ED in CF.

**400\* Fatherhood in males with cystic fibrosis: modality of conception and impact on clinical status**

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**Introduction:** Almost all male patients with CF are infertile. Most survive to adulthood. Because of successful ICSI and AID procedures the impact of paternity on disease course need to be addressed.

**Methods:** Case notes of male patients who had become fathers between 1990 and 2009 were reviewed retrospectively. Data on modality of conception and health status (lung function, weight, clinic visits and days of intravenous antibiotics) were recorded 4 years pre and post the child's date of birth. For each child data on DOB, gender, outcome, CF status and singleton/multiple birth were obtained.

**Results:** 32 children (20 boys, six sets of twins) were born to 20 males (median age 31.7 years, FEV<sub>1</sub> 66%, BMI 24.3). 2 births occurred between 1990–1994, 4 in 1995–1999, 8 in 2000–2004 and 18 between 2005–2009. Successful fertilisation was achieved by ICSI (n=20), AID (n=5) and natural conception (n=4); genotype DF508/3849+10kB C>T). One child was adopted. 2 children were conceived outside of the relationship. All fathers are still alive. 1 child died at 0.3 yrs (congenital heart defect). No child has CF; median age of 31 children 3.69 yrs. No significant change in weight, number of clinic visits or days of intravenous antibiotics/yr. Significantly increased rate of decline in FEV<sub>1</sub> post vs. pre (180 ml/yr vs. 60 ml/yr) but not with FVC (108 ml/yr vs. 43 ml/yr).

**Conclusion:** Biological fatherhood, AID and adoption are realistic options for men with CF. The additional responsibility of caring for a child may have a negative impact on the father's health. The significant fall in FEV<sub>1</sub> with new parental status suggests that these men require heightened observation and more intensive treatment.

**401 Contraception and sexual awareness in patients with cystic fibrosis**

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**Introduction:** Today there is a longer expectation of life for CF patients. So they find themselves facing with the management of expectations of adult life.

The changing of their role, together with the awareness of the physical and sexual growth, is an important aspect, not well-known, because there aren't enough studies.

**Aims:** To evaluate:

- use and types of contraceptives in CF patients;
- the need and demand for an educational intervention in this area by the operators of the center.

**Methods:** We proposed six questions semi-structured interview to 27 CF patients followed by our center, age 18–25 (mean age 21±2), 12 males and 15 females. The same interview was proposed to a health control group compared for sex and age.

**Results:** In control group 70.4% answer that “always” use contraceptives compared to 58.3% of study group. Moreover the study group answer that “rarely” use contraceptives, contrary to control group (12.5% vs. 0%). Both study and controls groups state the high use of condom (54.2% vs. 59.3%).

The results also show that experimental group has more often unprotected sexual intercourse (20.8%) than control group (7.4%). Both groups think that an educational intervention is very important but the CF adolescents have more interesting to improve pregnancy information than health adolescents (91.7% study group and 81.5% control group).

**Discussion:** The health adolescents have a higher use of contraceptive than CF adolescents. However both groups retain necessary more information about the contraception, and in particular the CF adolescents need to improve the knowledge of pregnancy. We think that a bigger sample to evaluate the CF adolescents sexual role is necessary.