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TAYLOR'S
PRINCIPLES and PRACTICE
OF
MEDICAL JURISPRUDENCE

ELEVENTH EDITION

Edited by

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TAYLOR'S
PRINCIPLES AND PRACTICE
OF
MEDICAL JURISPRUDENCE

Volume II

PREFACE TO THE ELEVENTH EDITION

SINCE Taylor brought out the first edition of this work just 90 years ago, the world has witnessed startling advances in all the physical sciences and a great, though not so spectacular, advance in the biological sciences. It would be true to say, I think, that in the past half century progress in science has been greater than in the whole previous history of mankind. The development of new instruments and new techniques has given the chemist, the physicist and the biologist new means of acquiring knowledge of the intimate structure and reactions of matter, of the manner in which so-called poisonous substances interfere with the functions of cells or the enzymes which are essential to their use. The serologist has pursued his researches into the elements of blood and tissues and has obtained greatly increased knowledge of identification and inheritance.

Our knowledge of the human mind and human behaviour has been extended and enlarged and we have witnessed a regular advance in our concepts of the place of punishment and reform in connection therewith. It would be wrong, however, to think that the enormous advances in medical and social science have been accompanied by a commensurate improvement in the human mind.

Successive editors of "Taylor" have endeavoured to keep the book abreast of these advances but the field has widened to such an extent that it has gradually become too vast to be covered by any one man. In this edition I have been fortunate in obtaining the assistance of Dr. Keith Simpson in the general editorship, and I have no doubt that his influence will be observed in most sections of the work. I have also had the privilege of enlisting the collaboration of Mr. Gerald Howard, Q.C., in the revision of the legal aspects. His long experience of medical affairs as seen in the Courts of Justice and in the General Medical Council should be of unique value to our readers. The section on Psychiatry and the Law has been largely rewritten by Dr. David Stafford-Clark whose advanced and balanced views on mental disease and behaviour are well-known. Mr. Nickolls, Director of the Metropolitan Police Laboratory at New Scotland Yard, has undertaken the revision of the toxicological section from the laboratory side. He has had an experience of toxicological procedures which is denied to most people in this country.

In this new edition a somewhat more radical revision has been attempted in order to keep "Taylor" abreast of the times. Several sections—notably those on Post-mortem changes; on Intersexuality as an identity problem; on the general procedure of Criminal Investigation; on Regional Wounds; Blood in Identity, Trauma and Disease—and the sections on Asphyxia and on Life Assurance have been very largely rewritten.

In Volume II, Abortion and Infanticide—and the greater part of the section on Toxicology have been similarly revised. Times change, and both modern views and current practice demanded major change in the text. No less than 292 new cases have been introduced into the first volume, together with some 40 new illustrations.

In the section on post-mortem change Dr. Keith Mant gave considerable assistance and for his help we thank him. We desire also to record appreciation

of the general help in proof reading given by Mr. R. Furbank, and in checking the bibliography by Mr. W. Hill, Librarian at Guy's Hospital Medical School. Dr. Keith Simpson's secretary, Miss J. Scott Dunn, undertook the major task of providing typescript from both editors' manuscript, and her great care and patience contributed much to the smooth collaboration achieved with the publishers in this new edition.

Apart from certain individual acknowledgements for illustrations there remains a record of thanks to be made to both the Commissioner of Police of the Metropolis and to the Assistant Commissioner (Crime) Mr. R. L. Jackson for permission to use other unspecified photographs which appear for the first time in this edition.

The assistance of the chemist, the physicist the biologist and of experts in other branches of science has given greater precision in our work with a corresponding increase in the value of evidence. Over all, however, there must be someone who is able to advise on the procedure to be adopted, the particular scientist whose help should be sought, and who takes a final responsibility of advising the Crown. Thus there would appear to be no lessening in the need for a general work such as this on forensic medicine, nor in the need for instructing medical practitioners on accurate observation. In that respect it is of interest to note how accurate Taylor was in his general observations and how little his forthright advice has been changed by time.

Edinburgh 1956/7.

SYDNEY SMITH.

CONTENTS OF VOLUME II

Part I: *Sexual Medical Jurisprudence.* *Obstetric, Civil and Criminal*

CHAPTER	PAGE
I. Impotence and Sterility	2
II. Virginity and Defloration	20
III. Pregnancy	23
IV. Delivery	39
V. Dissolution and Nullity of Marriage	47
VI. Legitimacy and Paternity	54
VII. Rape, Incest	65
VIII. Masturbation, Indecent Exposure, Gross Indecency, Indecent Assaults, Unnatural Offences, Sodomy, Bestiality	91
IX. Abortion	98
X. Medico-legal Aspects of Live and Still-birth.	130
XI. Medico-legal Aspects of Neonatal and Infant Death	152
XII. Infanticide—Criminal Aspects	173

Part II: *Toxicology*

XIII. The Law on Poisons. The Definition of a Poison or Noxious Thing	202
XIV. Dangerous Drugs Law	211
XV. The Action of Poisons. Circumstances Influencing This	215
XVI. Diagnosis of Poisoning	225
XVII. General Procedure in Poisoning	230
XVIII. Classification of Poisons. Poisoning By Various Classes of Poisons.	262

CHAPTER	PAGE
XIX. Poisoning by Metallic Elements and their Salts.	292
XX. Irrespirable or Toxic Gases	387
XXI. Poisoning by Alcohols, Glycols, Ethers and Aldehydes	425
XXII. Poisoning By Halogenated Hydrocarbons	464
XXIII. Poisoning By Aromatic Hydrocarbons	479
XXIV. Poisoning By Synthetic Organic Drugs	504
XXV. Poisons of Vegetable and Animal Origin	534
Appendix. Common Poisons in Domestic, Agricultural or Trade Use.	627
Index	630

PART I: SEXUAL MEDICAL JURISPRUDENCE. OBSTETRIC, CIVIL AND CRIMINAL

SEX as a feature of identity, and the problems involved in determining the sex of a person, when this is open to doubt, have already been fully discussed in Vol. I. We have now to discuss the concrete relationships of the two sexes—the woman as a possible wife or mother, the man as a husband and possible father, the union and the dissolution of the union of husband and wife, unlawful carnal knowledge of man and woman, or of man with beast, the products of the union of man and woman and the medico-legal problems involved.

Certain sex problems of a general nature, the solutions of which have a bearing on special cases, are discussed first and a review of the subjects of special interest then follows.

We shall therefore discuss our medico-legal problems in the following order:

Impotence and Sterility	pp. 2-19
Virginity and Defloration	pp. 20-22
Pregnancy and its Duration	pp. 23-38
Parturition or Delivery	pp. 39-46
Dissolution of Marriage	pp. 47-53
Legitimacy and Paternity	pp. 54-64
Rape and other Sex Offences.	pp. 65-97
Abortion	pp. 98-129
Medico-legal Aspects of Birth	pp. 130-151
Neonatal and Infant Death	pp. 152-172
Infanticide	pp. 173-201

CHAPTER I

IMPOTENCE AND STERILITY

Impotence

IMPOTENCE may be rigidly defined as "the incapability of either sex to allow or grant to the other the legitimate gratification of the sexual desire." The difference between this and sterility must be carefully borne in mind (*vide infra*), for whereas impotence may be a bar to union or a cause for divorce, sterility is neither one nor the other in the eyes of the law.

The causes of impotency may be classified as follows:

General or functional, connected indirectly with the sexual organs.	Age. Illness. Emotion.	{ Causing temporary, or permanent, incapacity.
Local or organic, in direct connection with the sexual organs.	Congenital or acquired conditions.	{ Curable. Doubtfully curable. Incurable.

All of these groups must be discussed.

Age as a cause of Impotency. In Females. As the woman is the more passive agent in the sexual act, there can be no limit to the oldest age at which she can be potent to allow the act, provided she be free from other impediment; whether she has her sexual instincts still preserved, or is fertile, has nothing to do with the matter, though we have no reason to believe that mere age ever extinguishes sex instinct while life remains. As regards the youngest age, before 16 the sexual act is either a misdemeanour or a felony (*vide* "Rape").

According to the Age of Marriage Act, 1929, no person of either sex may be married until he or she has attained the age of 16 years. This does not prevent potency being tested, however, and numerous records exist of pregnancies at ages ranging from 5½ to 15.¹ The child of 10 to 15 may be potent and fertile. Fairfield has reported 74 such cases.²

In Males. As to the age at which a well-formed male child is capable of erection of the penis nothing need be said; it is a function inherent in the structure of a healthy penis, and a question on the subject cannot arise. At the other end of the scale of life, records seem to show that a man of 80 is capable of becoming, and has become a father, and we have no physiological reason for believing that the mere question of "erectio penis" can ever arise on the score of age alone.

¹ Wilkins, L. 1950. 'Diagnosis and Treatment of Endocrine Conditions in Childhood and Adolescence.' Springfield, Ill., Thomas.

² Fairfield, L., 1940. *Lancet*, 2, 61.

Illness as a cause of Impotency. *In Females.* Again the more passive rôle played by the female prevents any discussion on this point. A woman who has a natural vagina cannot by any general disease be rendered impotent. Mere physical resistance or persistent refusal, though not constituting medical impotence may give grounds for a nullity suit.¹

In Males. It is far otherwise with the sex that plays the active part. As a general rule, diseases which do not affect the brain or spinal cord, and which are not attended with great debility, do not prevent intercourse. On the other hand, all diseases which are attended or followed by great general debility must be held to suspend, at any rate temporarily, sexual power on the part of the male; of brain and cord diseases, some are known permanently to destroy potency, while others may, for a time, increase it, though such usually lead to the onset of permanent impotency.

In **acute febrile illnesses** impotency is likely so long as the fever lasts; when fever is subsiding, or has been replaced by convalescence, the power is rapidly regained.

One of these acute diseases, *viz.*, **Mumps**, must receive special notice. It is well known that mumps has a special proclivity to attack the testicles and such attack, especially in youth and adolescence, is not infrequently followed by atrophy of the gland. After this atrophy, impotence occasionally follows, though admittedly not often. Inflammation of both testicles (double orchitis) is a rare sequel to mumps.

Of **chronic general disease**, *i.e.* apart from disease of the generative or nervous systems, such as heart disease, chronic nephritis, etc., one can only say that the sexual function is so intimately allied to bodily vigour and healthy nervous energy that the integrity of these may be said to be essential for the act; but this must not be taken to mean that we have knowledge that any of these diseases will totally prevent an *occasional* erection which may be used for its natural purpose, though they will undoubtedly diminish the frequency of potency. Habits of drunkenness, the abuse of narcotics, or other drugs, may act in a similar manner, and it is possible that long-continued bad habits of this nature may result in impotency, permanent while the habit lasts, but occasionally disappearing with discontinuance of the habit.

Of **mental and other brain diseases, and of affections of the spinal cord**, many are known to have an effect upon potency in the male subject. Excessive sexual activity is known to be a feature in many forms of mental alienation in their early stages, though this is usually followed by permanent impotency. Lack of sexual power is common in those suffering from paranoia and from dementia præcox and particularly in general paralysis of the insane.

In *tabes dorsalis*, and in disseminated sclerosis, interference with the sexual powers in one direction or the other usually occurs. It must not be considered, however, that impotency is a universal and inevitable effect of this disease. Occasionally the reverse effect is seen, *viz.*, satyriasis or excessive sexual inclination. In a case of myelitis, potency or impotency would depend upon the situation of the lesion and the extent of recovery. Priapism or painful persistent erections of the penis totally unassociated with any sexual desire, which occurs in some lesions, must not be confounded with a potent condition.

¹ Under the Matrimonial Causes Act, 1937.

These cases of alleged impotency from corporeal disease, when they require to be elucidated by medical evidence, create great difficulty.

A question once arose respecting the legitimacy of a child conceived during wedlock, but born 4 months after the death of the husband. In presumption of law, the child was legitimate, because husband and wife were at the time living together, and conception and birth were, as to date, in accordance with the ordinary rules. Two months before the supposed date of conception, the husband, a man of intemperate habits, was seized with paralysis (*hemiplegia*) accompanied by coma, and he lost the use of the right side of his body. In about a month he partially recovered, but the paralysis never left him. A month later he was attacked with general dropsy and disease of the liver, and he died 5 months after the supposed date of conception, and 4 months before the birth of the child. A year after the death of the husband, the widow married the alleged adulterer, and had by him four children; but for 8 years preceding the death of her first husband this woman had borne no child, and it was only when her intimacy with the alleged adulterer commenced, and during her husband's illness, that she became pregnant.

The question submitted to expert medical witnesses was—Was it possible or probable that the husband could have begotten the child in the diseased condition in which he was represented to have been at the date of conception? The opinion given was that it was possible—although high improbable—because there was opportunity of access, and because sexual power, if lost by the attack of paralysis, might have returned at the material time. Diseases of this kind tended to suspend sexual power; in this particular instance, the effect would have been aggravated by the intemperate habits of the husband, and the general debility from which he was proved to be suffering. Further, non-procreation during the 8 years of constant intercourse with his wife was clearly not owing to sterility or incapacity on her part, because she had borne children after her second marriage. The evidence regarding the precise bodily condition of the husband about the date of conception was conflicting, and the court decided that the child was the child of the husband. The legal presumption of legitimacy by wedlock and possible access was too strong to be rebutted by the medical evidence.

It is very rare, if not unknown, for these affections of the spinal cord to have any direct effect upon the testicles, but should they do so and cause also motor paralysis, there can be no doubt of impotency. Curling quotes a case from a foreign writer, in which, in spite of paralysis (*paraplegia*), of some years' duration, a man retained sufficient sexual power to have prolific intercourse. When the paralytic person is advanced in age, it is highly probable that he is impotent.

A woman applied for an order of affiliation on the putative father of her bastard child. She was a widow, and the illicit connection took place about 2 months before her husband's death. The husband was at the time 84 years of age; he was bed-ridden, and for many weeks before his death he could not move in his bed, and was unable to pass his urine without assistance.

The medical opinion of those who had examined him was that he was impotent from physical infirmity; and in this opinion Taylor concurred, stating, however, that unless the male organs were diseased or destroyed, it could not be said that intercourse was impossible. It was, however, wholly improbable that the husband could have been the father of the child.

Blows on the head or spine, by affecting the brain and spinal cord, may produce impotency. Several cases of impotency from this cause were related by Curling. It has been noticed that blows on the under and back part of the head, in the region of the cerebellum, have been followed by loss of sexual power on recovery. Sometimes this is temporary; but when there is wasting of the testicles, it is permanent and irremediable.

Emotion as a Cause of Impotency. *In the Female.* On account of her passive rôle, emotion can hardly be said to be a definite cause of genuine and

ineradicable impotency, but at the same time the emotions in a female (especially virgins), may create such difficulty as to constitute practical impotency. This condition is known as vaginismus and may be due either to actual pain on contact or to fear of pain. It may be due to personal aversion or to a general feeling of aversion to the hetero-sexual act. In this condition any attempt at intercourse produces a violent contraction of the constricting muscles of the vaginal orifice and often a contraction of the adductor muscles of the thighs. As a result, intercourse is quite impossible. In many cases the local cause of the condition may be remedied, in others, intercourse under analgesia resulting in pregnancy may produce a lasting cure.

In the Male. Emotion is a common cause of temporary impotence, and also of permanent impotency as regards one particular female. Tact and possibly the use of drugs will frequently overcome this form of impotency. The sexual desire, like other animal passions, is subject to great variation; and there are undoubtedly men, otherwise masculine enough, and healthy, who have experienced no desires of this kind. They are in a state of natural impotency—a condition which the canon law designates as “frigidity of constitution”. This is not to be discovered by examination, but rather from their own admission. Under this head we may class hypochondriacal affections.

Hormonic dysfunction may lead to temporary or permanent impotency in the male.

Developmental Abnormalities

In the male	{ Arrested development of phallus. Maldevelopment of penis. Intersex “female”.
In the female	{ Absent vagina. Vagina ill developed; too small. Intersex “male”.

Acquired Conditions

In the male	{ Disease of penis. Injury or amputation of penis Disease of, or accident to testicles and ducts. Excision of testicles.	{ Intentional. Accidental.
In the female	{ Disease of walls, or stricture. Tough hymen. Tumours bulging in the walls. Prolapse.	{ Causing occlusion of vagina or so much pain as to amount to occlusion.

Some of these conditions are obviously incurable; others may possibly be recoverable by time, and some by the art of the surgeon.

Deformities or Defects of Development—(a) *In Males.* In intersex states there is a defective development of the external organs, and with this there is generally an absence of sexual desire.¹

¹ Morison, H., 1935. *Brit. J. Surg.*, 22, 619.

Capon (1951)¹ reported a "boy" of 29, captain of games at his school, who strove to hide a female breast development which became marked at the age of 15. His interests were heterosexual and he married at 26—satisfactorily, achieving intercourse. At 29 he noticed a bloodstained discharge coming from his hypospadiac urethral orifice, and this became cyclical, lasting 3 to 4 days every 28 days. He had a female type body with downy beard hair. The gonads were palpable in the labioscrotal folds and a persistent uro-genital orifice contained both urethra and vagina: a uterus was present. He was masculinized by removal of an ovary during herniotomy, and testosterone therapy was instituted.

Farr met with a case of a man, aged 42, in whom the sexual organs remained "in an infantile state". There was some difficulty in finding the testicles, in consequence of their small size. On examining the contents of the glands microscopically, no spermatogenesis was detected. This person's voice was effeminate, and he was devoid of hair on the chin and pubes.

It is not, however, always to be inferred that a male with maldeveloped organs is incurably impotent.

A man, aged 26, consulted his physician on the propriety of marriage. His penis and testicles but little exceeded in size those of a boy of 8 years of age, and he had never, until this acquaintance with his intended wife, felt any sexual desire. He married, and became the father of a family; and at the age of 28 the organs had attained the full development of those of an adult.

The presence of a duplicate penis, according to Mende, is no bar to the exercise of sexual power, provided one organ possesses the normal features of the male organ. This author refers to cases of duplex organs. One of these sexual monsters, a youth with two distinct penes, was exhibited in London many years ago. He could exercise his functions with either organ, but there was only one testicle to each penis.

Finally, the penis, as such, may be (for practical purposes), completely absent, owing to arrested or intersex development. Impotence is, of course, usual, and probably sterility also, though such is not certain, depending upon the preponderance achieved by the male gonad. The phallus structure may, as in Capon's case (*loc. cit.*), achieve intercourse.

(b) *In Females.* The vagina in both malformed females and intersexuals is sometimes absent, a condition which must ordinarily be looked upon as incurable impotence. When the vagina is present, but too small owing to deficient growth, the condition may be curable by surgical treatment.

Hodgson² described the case of a woman of 32 who was unaware of the fact that she had no vagina until her marriage, when intercourse was found to be impossible. She had never menstruated, and at operation designed to effect an artificial vagina no uterus could be found: the vagina was successfully constructed.

In *B. v. B.* (1954, 3-Weekly Law Report, 237), a case in which a husband petitioned for annulment of marriage on the ground of incapacity on the part of his wife, it was said that at the age of 17 she had had certain male sex glands removed: she had no vagina, but, a month after marriage, underwent an operation for the construction of an artificial vagina (4-6 in. long). The husband alleged that penetration met with no success owing to stricture of the canal. The Commissioner held that nothing that could be said to be proper coitus could ever take place, or have taken place, in the case before him by reason of the fact that the wife's vagina was not a natural but an artificial organ.

The case was difficult to reconcile with the *Baxter v. Baxter* (*Baxter v. Baxter*, [1947], All E.R., 387) case in which the wife would not have intercourse without the intervention of an artificial means of contraception: this was held by the House of Lords to be insufficient to entitle the husband to a

¹ Capon, A. W., 1951. *Lancet*, 1, 563.

² Hodgson, N., 1933. *Brit. med. J.*, 1, 822.

decree of nullity. For practical purposes complete impotence resulted in each instance because of artificial obstruction—in the *B. v. B.* case an unsuccessful artificial vagina, and in the *Baxter v. Baxter* case a contraceptive.

Considerable argument as to the real meaning of the word “consummate” took place in the case of *Baxter v. Baxter*, and it was clear, from what Lord Wright, Lord Merriman, Lord Simonds and Lord Normand concurred in, that Lord Jowitt’s view of consummation being what was understood “in common parlance” and the “light of social conditions known to exist” was what would hold in the eyes of the law. No discussion on contraceptives could enter into a suit of nullity based on impotence, nor any distinction between degrees of intercourse—as had been allowed on appeal in *Cowen v. Cowen*. (2 All E.R. 197).

Disease and Accident as Causes of Impotency. Acquired Conditions: (a) *In the Male.* (i) *Of the Penis.* Temporary impotence may be caused by an acute disease of the penis, such as gonorrhœa, sores on the glans or foreskin, etc. These need not be further considered; they are matters of general surgery: more chronic disease, such as epithelioma, could relate to impotence only when it had lasted through such a period as to raise a question of the legitimacy of a given child. Each case must be judged on its merits; it is impossible to lay down general rules. Complete amputation of the penis must render a man impotent unless a sufficient length of stump is left to enable introduction to take place.

In a series of cases shown at the December meeting of the Medico-Legal Society in 1904, Dr. Harvey Littlejohn exhibited a specimen of part of a penis “cut off by the man’s paramour in a spirit of revenge”.¹

A specimen (No. 1973) in the Gordon Museum at Guy’s Hospital shows the self amputated penis and scrotum of a man who “after attending a Bethel Union meeting on board a collier in Erith, in a fit of religious melancholy, amputated his genital organs with a razor and threw them under the galley fire”.

(ii) *Of the Testicles.* The amount of disease that may exist in one or even both testicles without destroying either sexual appetite or power is remarkable, and even complete destruction or removal does not *at once* destroy the power of connection, though it undoubtedly does so after a time. If the testicles are removed after puberty, the power of erection remains for a long period. For further information surgical manuals must be consulted. Impotency from masturbation is very doubtful, and depends more on emotional disturbance than anything else.

(b) *In the Female.* Vaginal diphtheria or ulcers of any sort may, on healing, lead to a condition of occluded vagina, in some cases of a permanent and irremediable character. In elderly females a disease known as kraurosis vulvæ has been found to produce the same result. Conditions of toughness of the hymen are curable, and so are many cases of tumours, fibroids, cysts, etc., which may block the canal; prolapse of uterus, vaginal hernia, may be curable. For further information, manuals of gynæcology must be consulted.

The problems raised by artificial insemination are discussed later in this section (*vide* p. 18).

Sterility

This is simply the opposite of fertility, or the power of procreation; it is a function of spermatogenesis or of ovulation, and as such is absolutely

¹ *Trans. med. leg. Soc.*, 1905, 2, 114.

independent of whether or not impotence be present. The distinction between impotence and sterility is very important, and must be clearly borne in mind. Sterility by itself offers no ground for a dissolution of marriage, though impotence may become a just ground. A man or a woman may be sterile and yet not impotent, and impotent yet not sterile. As with impotency, we may make a primary classification of the causes of sterility thus:

General or functional, indirectly affecting the sexual organs.	$\left\{ \begin{array}{l} \text{Age.} \\ \text{Illness, emotion and} \\ \text{unknown condi-} \\ \text{tions.} \end{array} \right.$	Causing temporary or permanent sterility.
Local or organic, concerned directly with the sexual organs.	$\left\{ \begin{array}{l} \text{Developmental or} \\ \text{acquired condi-} \\ \text{tions.} \end{array} \right.$	Curable, amenable to treatment, or incur- able.

Age in Relation to Sterility

In the Male. Puberty. Until the period of puberty the testicles are small, and they increase very little in size in proportion to other parts. Fertile sexual function in the male depends on the proper development of these organs; but the age at which fertility appears differs in different persons. The age of puberty in a healthy male in the British Isles varies from 14 to 17 years; its appearance is, however, affected by nutrition, constitution, the relative development of the associated pituitary, thyroid and adrenal glands, and its rapidity of progress with the moral circumstances in which the individual is placed. In some cases it is not fully developed until the age of 21. Race, rather than climate, bears on the age of onset.

The seminal secretion in the male is not procreative until it contains living *spermatozoa*. In cases in which they are absent, from whatever cause, it is a fair inference that the person is sterile, or that he has for the time being lost the power of procreation.

A case is recorded in which a man, *æt.* 42, who was married, and whose wife had borne a son then 8 years of age, died after 4 days' illness from strangulated hernia. The testicles, which lay in the inguinal canals, were examined, and no spermatozoa were discovered in either of them. These must have been formerly present, although absent at the time of examination, as the child was then 8 years of age. During this long interval, the secretion may have undergone a change, and have become infertile.

So long as spermatozoa show movement they are alive and must be presumed capable of fertilizing an ovum.

It is certain, then, that a male is incapable of procreating until spermatozoa have appeared in the seminal secretion, and that he loses this power when they disappear. The *age* at which they appear varies with all the causes that affect puberty.

In the *British Medical Journal* for April, 1887, the following case was reported:

"A young woman was sent to me for examination, and it was evident she was pregnant. She confessed it, and was brought face to face with her paramour: they both confessed that the woman had led him astray, and allowed him to have intercourse at least a dozen times. The present age of the father is 13 and 3 or 4 months, and as quickening had taken place at the time of my examination of the woman, the lad could have scarcely attained the full age of 13 at the time the intercourse took place."

Cases of precocious development of the external appearances (pubic hair, large penis) of puberty are recorded in some number in connection with the diagnosis of gonadal or adrenal tumours (*vide* Wilkins¹).

In a case of contested legitimacy or affiliation, this question regarding the age at which a procreative power appears in the male may have an important bearing on the issue. Thus the person may be so *young* as to make it impossible that he should be the father of a child imputed to him. According to English Law there is an irrebuttable presumption that a boy under 14 cannot procreate a child. That he may, however is certain.

Fairfield² reported the case of a girl of 13 years and 3 months who was pregnant by a boy of the same age, and who at term delivered a 6 lb. 3 oz. child. In the same account of 74 pregnancies under 16, the author can "recall having seen two cases" aged 12. Only one of the girls concerned was a certified defective. Eight of the pregnancies terminated spontaneously between the 28th and 38th week, and it was notable how little physical injury appeared to result. A child of 13 had an 8 lb. 6 oz. baby without sustaining a perineal tear after a 13-hour labour.

A medical man on these occasions should not have regard only for the mere *age* of the youth, but ascertain whether the sex organs are well developed, and whether there are about him any of the features of virility, indicated by testicular development, the growth of hair, and a change in the voice. If these signs are present, whatever may be his age, there is strong reason to suppose that the sexual functions are developed. The seminal fluid should be examined for live spermatozoa, for as Pollak has pointed out, aspermia is not uncommon in otherwise well-sexed adults.³

On the other hand, it may be a question at what time the procreative power disappears in a male. That impotency tends to occur as one of the natural consequences of *advanced age* is undoubted; but this forms no legal impediment to the marriage of parties, however old. The legal presumption is, that the generative faculty does not disappear through age; and if this be alleged, and legitimacy disputed on this ground, it must be satisfactorily proved by those who would benefit by the allegation. This amounts almost to an impossibility, because it is well known that there is no fixed age at which the sexual functions cease either in the male or female; and men who have passed the ages of 60, 70, and even 80 years, have been known to be capable of fruitful intercourse. The causes of sterility in advanced age are to be found in the excretory rather than in the secretory apparatus. Thus obliterations in the canal of the epididymis and of the vas deferens have been met with, and changes in the vesiculæ, the effect of which is to prevent the accumulation or the passage of the seminal fluid. *Per contra*, spermatozoa have been found in the seminal fluid from the testicles of a man of over 70 years of age, and on one occasion in the testicles of a man of 96. It is highly probable that the fecundating power may be retained by the male up to the age of 100. Dieu has given the results from 150 autopsies of men between the ages of 64 and 97. In 61 per cent no spermatozoa were found. Four of the cases were nonagenarians: of these none had spermatozoa.

Although the procreative power may be lost at an advanced age, the stimulus for intercourse is often very great, and is often associated with and probably attributable to an enlarged prostate. In cases of prolonged virility it is observed that the bodily and mental powers are also retained in an

¹ Wilkins, L., 1950. 'Diagnosis and Treatment of Endocrine Conditions in Childhood and Adolescence.' Springfield, Ill., Thomas.

² Fairfield, L., 1940. *Lancet*, 2, 61.

³ Pollak, O. J., 1943. *Arch. Path.*, 35, 140.