PRACTICE OBSERVED

The GP and the Specialist

ENT

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It is regrettable that the study of ear, nose, and throat diseases occupies so small a place in the syllabus of most medical schools, since these disorders occur very frequently in general practice. Too many general practitioners have become self-taught from necessity. Most can learn well to recognise the normal throat, and most acquire sensible theoretical understanding of the problems from their reading, but it is improbable that the subtle changes of the abnormal tympanic membrane can be learnt without informed feedback from an experienced teacher. So it is that many otological signs are misinterpreted and inappropriate treatment advised. The general practitioner is further handicapped in assessment of the ear by the use of the electric auriscope. There are common abnormalities of the middle ear and tympanic membrane that cannot be recognised by an examination with the static auriscope: they depend on observation of the drumhead moved by the change in air pressure caused by a Siegel's speculum. This is possible only with a headlight or head mirror, and the general practitioner's lack of that facility deprives him of an important piece of the armamentarium of otological assessment.

What has the ear, nose, and throat specialist to offer to the general practitioner? Firstly, of course, are experience and expertise in examining the upper respiratory tract and ears by techniques and with instruments that are not usually set up and available outside an ear, nose, and throat department. Next is the application of specialist equipment such as the binocular microscope for examining the ear; audiometric apparatus for assessing auditory function; the tools of vestibular testing; and the resources of x-ray and pathology departments. Many forms of treatment are available through the ENT department, which would not be provided by the general practitioner, such as hearing aids, outpatient procedures like antral washout and removal of nasal polyps, and facilities for inpatient care and operation when appropriate. Lastly, an important offering to the general practitioner must be a second opinion pressing the moral support so often needed by patients with chronic or relapsing disorders.

Now to look at common errors made by general practitioners, and misapprehensions. First, let it be recorded that the usual level of assessment and care is high in general practice: were it not so, the outpatient departments where these misconceptions are revealed would be far more heavily pressed than they are.

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Tonsil disorders

The indications for tonsillectomy and adenoidectomy still cause controversy. The general practitioner must help the ear, nose, and throat surgeon by writing a good history, since on that and that alone depends the decision to operate. Clinical examination rarely shows anything of value, and is done largely to satisfy the parent who might well consider its omission bizarre. What is needed from the history is the number and severity of genuine attacks of bacterial tonsillitis, as opposed to viral upper respiratory tract infections, which are so prevalent in the first two years of association with other children. This history is hardly ever reliably derived from the parent, whose attitude to possible operation is often strongly and emotionally coloured. The more or less unnecessary examination will show the size of the tonsils —which is of virtually no importance whatsoever. It is exceedingly rare for the physical bulk of tonsillar tissue to compromise the airway; and tonsils hardly ever interfere with normal swallowing. None the less, many parents believe that their child does not eat to their satisfaction because its tonsils are too large —a fallacy of which they must be firmly disabused. Tonsils of identical bulk can appear small or large according to the ana-

tomical accident that sinks them deeply between the pillars of the fauces, or hangs them almost free and pedunculated in the oropharynx. Size is important only when the observing general practitioner has seen the tonsils swell during an attack of tonsillitis and has noted no shrinkage with resolution. This is an observation for the history and cannot be appreciated from interim inspection of the pharynx. In the treatment of acute tonsillitis the commonest error is to prescribe an antibiotic for too short a time. No course of treatment should last for less than 10 days. Failure to prescribe for that duration is often followed by recrudescence of the infection with recurrence of an attack of tonsillitis that is erroneously accepted as new and separate.

Secretory otitis media and the "glue ear"

Pain, usually short lasting and niggly, is a common symptom when the uninfected middle ear is occupied by a mucoid effusion. The appearances of the tympanic membrane in this condition are not easy to elicit with the standard auriscope, and very often this pattern of symptoms is incorrectly attributed to recurrent acute otitis media, particularly since red patches of vascular injection may be visible on the tympanic membrane. The general practitioner should suspect that the child is not suffering from otitis media if the pain is brief and recurrent, if there is no fever, and if the pattern of injection of the tympanic membrane persists unchanging as the days pass. Confident exclusion of middle-ear infection should save the child from the unnecessary administration of systemic antibiotics; for the correct treatment of this disorder is, of course, surgical paracentesis, and insertion of grommets.

Nasal disorders

Sinusitis is overdiagnosed and misunderstood. It is rare as a cause of headache, and it is rarely the explanation for recurrent chest infection. X-ray reports, without actual films, are often misleading, for many radiologists incorrectly interpret minor common abnormalities—such as mucosal swelling within the antra—as being due to "chronic infection"; (usually it accompanies the generalised nasal mucosal swelling of vasomotor rhinitis). Often then, patients are referred to the ear, nose, and throat clinic carrying a diagnosis of sinusitis and a radiologist's report, but no actual films for the ENT surgeon to inspect. Maxillary sinusitis should be suspected from a radiological examination only when an antrum is opaque or contains a fluid level.

Nasal obstruction in both child and adult is due to vasomotor rhinitis more often than to any other condition. Most general practitioners nowadays seem well aware of the avoidable hazards of nasal decongestant sprays for this chronic condition, and that they should be used only when their effect is needed for no longer than a week or two; perhaps more should become aware of the neurotic nasal obstruction some patients vouchsafe in the presence of a normal airway.

The "postnasal drip," beloved of many patients and some general practitioners, deserves comment, for it does not exist. The symptom so designated is due to the development of an awareness of the usually unconscious process of swallowing normal nasal mucus. This may arise because change in the secretion of mucus renders it more viscid, but it is not uncommon in the absence of abnormalities, and it is exacerbated by vigorous hawking undertaken to relieve it. This symptom, often misinterpreted by general practitioners, frequently follows upper respiratory tract viral infections, when it may be associated with a chronic non-productive cough. That cough is not due to irritation of the larynx by the fabled "postnasal drip," but to a lowered threshold level of the cough reflex. It is a harmless but annoying complaint, which may persist for months.

Vertigo

The two commonest errors are probably the failure to recognise benign paroxysmal positional vertigo, and overdiagnosis of Menière's disease, particularly in elderly patients. Benign paroxysmal positional vertigo is so easily recognised by performing a positional test and watching the characteristic rotatory nystagmus, accompanied by vertigo, developing after a latent period, and fatiguing within seconds, that it should easily be diagnosed in the home. Menière's disease is never an accurate diagnosis unless the hearing loss, which is usually unilateral, fluctuates from day to day in relation to the episodes of vertigo, and is accompanied by intolerance for loud sounds, and when other causes of endolymphatic hydrops have successfully been excluded. Too often tinnitus due to presbycusis (hearing deterioration of age) is used to justify this diagnosis in a patient suffering from vertigo for quite other reasons.

Chronic ear disease

The treatment of chronic middle-ear infection with discharge rarely calls for the use of systemic antibiotics. Whether it is safe tubotympanic disease, or the nastier cholesteatomatous variety, the discharge will not respond to systemic drugs, since the regions infected are avascular, and the organisms are usually Gram-negative rods insensitive to any antibiotic safe for systemic administration. Treatment is first by aural toilet under illumination, with the instillation of local antibiotics, often combined with steroids. The exception would be when an ear with a perforated drum has an acute infection, recognisable by the pain, possible fever, and pulsation of the issuing discharge.

Otalgia

Pain in the ear is often inadvisably treated with antibiotics, even when there is no firm evidence of middle-ear disease. The pain is often referred—from the wisdom teeth, jaw joints, upper cervical spine, or crevices of the upper food passageway. Referred pain should always be suspected if the tympanic membrane on the affected side is truly normal. This abuse of antibiotics probably bespeaks lack of confidence on the part of the general practitioner in recognising normality.

Deafness

In managing deafness, particularly of recent onset, criticism can be levelled at the excessive reliance on syringing. Too often it seems to be used as a diagnostic test, probably because many patients visit their general practitioners asking not for advice about their symptom but for a "syringe." Sudden deafness in one ear is an emergency, and it is surprising how often it is tolerated by the patient and the general practitioner—in circumstances that would not obtain with sudden loss of sight in one eye. Urgent referral for specialist advice must be advocated.

Temporary or intermittent deafness is too often ascribed by the general practitioner to Eustachian tube troubles and treated with decongestants. The high prevalence of cochlear hydrops, with fluctuating hearing loss in the inner ear, is not sufficiently appreciated.

The throat

Diseases of the throat have, fortunately, been well advertised, and it is now unusual for a general practitioner to delay referral of patients with hoarseness lasting for more than the statutory three weeks for laryngoscopic examination.

Practising Prevention

Pregnancy

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The aims of modern maternity care are the early diagnosis of variations from the norm and detection of asymptomatic, potentially threatening conditions in either mother or fetus. Although systems of antenatal care are generally well established, it seems likely that they are not always fully implemented,[1] and opportunities for preventive care may sometimes be lost. General practitioners, who take some part in the care of over 90% of pregnant women, are especially well placed to remedy this.

Preconceptual care

No woman need conceive before she intends to do so. It has been shown that premature pregnancy (especially in teenage and unsupported mothers) carries an increased risk of perinatal mortality and also of subsequent child neglect or abuse. Effective contraceptive methods should therefore be made available as soon as the need becomes apparent, and the subsequent interval used to prepare the woman for motherhood. Attendances for fertility control may be used to educate about smoking, alcohol, drugs, and weight control. When a woman contemplates becoming pregnant and discontinues contraception nutrition may become important. For example, vitamin B and folate supplements should be given to any woman with a family or a personal history of a child with spina bifida or anencephaly.[2] Similarly, expatriate Asian women may benefit from vitamin D supplements, since a deficiency has been shown to result in postnatal growth retardation (and sometimes frank rickets) in the children.

Secondly, the preconceptual care may be used for certain relevant screening procedures. Many schoolgirls who have been born since the 1960s will have been offered immunisation against rubella in their early teens. Unfortunately, not all took advantage of this opportunity and the Cendehill-type vaccines that were originally used did not always achieve satisfactory immunity. Thus even in the 1980s 10 to 15% of women are seronegative[3] and may thus be at risk of infection during early pregnancy if they are not identified and immunised at least three months before contraception is stopped. The blood sample taken for estimation of rubella HAI (haemagglutination inhibition) titre may also be used for ABO and Rh grouping. Rh-negative women who subsequently abort or terminate a pregnancy should routinely receive anti-D globulin so that the (albeit small) risk of rhesus isoimmunisation is averted. In women of Mediterranean or African origin the blood should also be screened for thalassaemia and sickling traits. In Britain about 10% of women of Negro origin are carriers of the HbS gene, and, although they are unlikely to have problems in pregnancy, should they marry a similar carrier the chance of producing a seriously affected homozygous fetus is one in four.

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Finally, advantage should be taken during this preconceptual phase to stabilise the management of existing medical conditions such as diabetes, hypertension, and chronic renal, cardiac, respiratory, or neurological conditions, and to discuss the implications for pregnancy with the patient.

Antenatal care

Although antenatal care continues to be organised on conventional lines there are certain key points during pregnancy when particularly important procedures should be undertaken.

FIRST CONSULTATION

Women should be encouraged to present early in pregnancy to obtain the maximum benefit from the objectives of preventive care. After two menstrual periods are missed it is usually possible to confirm pregnancy by a clinical examination, and specific educational, prophylactic, and screening procedures can begin. If rubella and rhesus status are not already known, a blood sample should be taken at the first interview. A patient found to be seronegative for rubella should then be retested three to four weeks later. An appreciable rise in HAI titre or the presence of IgM antibody suggests recent infection and that termination of the pregnancy must be considered. Part of the first blood sample can also be used for ABO and rhesus blood grouping, and many centres now routinely screen pregnant women serologically for syphilis and hepatitis B. Seropositive results for syphilis should be referred to a specialist in genitourinary medicine, while for hepatitis B carriers special precautions will be required by their attendants during any invasive procedure and at delivery.

Finally, a midstream specimen of urine should be sent for bacteriological examination. About 5% of women will have asymptomatic bacteriuria which, if not treated, may lead to frank pyelonephritis and possibly an increased risk of retarded intrauterine fetal growth or preterm delivery.

16 WEEKS

Firstly, is uterine size consistent with gestational age? Estimations based solely on the date of the last menstrual period may be inaccurate in as many as 25% of patients. If a discrepancy exists ultrasonography should be requested to enable more accurate dating and to exclude other possibilities, such as missed abortion or multiple pregnancy.

Secondly, at many centres it is now customary to screen all women for neural tube defects in the fetus. A raised alpha-fetoprotein concentration in maternal serum detected between 16 and 22 weeks suggests an open neural tube lesion, and a specialist opinion will be needed. Although modern high definition scanners can often show skeletal defects of this type, a high alphafetoprotein concentration in the amniotic fluid is

also evidence of an open lesion and an indication for mid-trimester abortion.

Amniocentesis should also be offered to any woman with a history of previous chromosomal or neural tube defect or a family history of an enzymatic or sex-linked congenital trait.[4] In women aged 37 years and over the probability of the fetus having Down's syndrome becomes greater than the risk to the fetus of amniocentesis, and many patients in this group will request the procedure.

Thirdly, any woman with a history of midtrimester abortion (either spontaneous or induced) or previous early preterm delivery should have a careful vaginal examination. Effacement, laceration, or appreciable dilatation of the cervix at this stage may be an indication for cervical cerclage, although the true value of this procedure in the prevention of the preterm delivery has yet to be critically evaluated.

Finally, 16 weeks of gestation is the appropriate time for the patient to receive iron and folate supplements to guard against subsequent development of iron deficiency or macrocytic anaemias of pregnancy. The necessity for these supplements in every case is, however, open to question.[5]

28 WEEKS

Examination at 28 weeks is of particular importance since it forms a baseline to which deviations from the norm in the third trimester may be related. A blood sample should be checked for anaemia and, in rhesus-negative women, for the presence of rhesus antibodies. The gestational age of the fetus should be carefully reassessed on clinical evidence and, if necessary, by ultrasound measurement. Poor maternal weight gain associated with poor uterine growth are important predictors of fetal growth retardation and thenceforth serial ultrasound measurements and maternal urinary oestrogen assays (as indicators of placental function[6]) may be advisable. Women with a history of pre-eclampsia are at risk of both recurrence of this condition and of fetal growth retardation, and raised plasma urate concentrations at 28 weeks may predict this. Any history of bleeding in the second trimester is sinister, suggesting placental malposition or abruption. Again, ultrasonography can assist in locating the placenta, and if a low-lying placenta can be confidently excluded some degree of abruption should be assumed and specialist opinion sought.

34 TO 36 WEEKS

Maternal blood must again be screened for anaemia and rhesus or other antibodies. Fetal growth should be formally reassessed and investigations started if there is a suspicion of growth retardation. Dynamic tests of fetal well-being may now also be appropriate.[7] The simplest is the subjective fetal kick chart, which is completed daily by the mother and should be reviewed at weekly intervals. External cardiotocography may also be advisable; if the fetal heart rate does not respond to fetal movement this suggests poor placental function and thus a fetus at risk.

Malpresentation should be obvious by this stage of pregnancy. If a breech or transverse lie is found the advisability of external version must be considered. In nulliparae, if version is contraindicated or not feasible, a careful clinical and radiological assessment of the pelvis should be made. Any patient whose pelvic architecture is less than optimal may better be delivered by elective lower-segment caesarean section. On the other hand, when the presentation is cephalic, cephalopelvic disproportion need rarely be considered before the patient is in labour.[8]

Finally, infective agents in the birth canal may threaten the infant during parturition. In any woman with a past history of herpes genitalis, a high vaginal swab should be taken and sent in transport medium for virological examination. If herpes virus is detected delivery may be achieved more safely abdominally than vaginally. Similarly, since perhaps one in eight women are asymptomatic vaginal carriers of group B streptococcus, and the incidence of streptococcal septicaemias in neonates is 2 per 1000 there may be a case for investigating all patients bacteriologically at 36 weeks and treating the offspring of positive women with prophylactic antibiotics.

ONE WEEK PAST TERM

Perinatal mortality increases with the duration of post-maturity. Evidence regarding accuracy of gestational dating should be reviewed in any woman who is still undelivered one week past term. If no reasonable doubts exists regarding her dates induction of labour should then be considered.

Conclusion

The main causes of perinatal mortality and morbidity today are preterm delivery, congenital defect, and intrauterine hypoxia. Although little progress has been made in either predicting or averting the preterm delivery, genetic congenital anomalies can now often be detected and the fetus aborted. Other defects—for example the results of rubella infection in early pregnancy—could, with a sufficiently enthusiastic programme for prophylaxis, be entirely eliminated. Intrauterine hypoxia, presenting as fetal growth retardation, is all too often overlooked but the outcome in terms of fetal wastage could be greatly improved if a higher index of suspicion existed and appropriate management was implemented. General practitioners, in fulfilling their role in the care of women in their fertile years, are in a strong position to initiate the appropriate programmes for prevention and so make an effective contribution toward the health of the next generation.

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ONE HUNDRED YEARS AGO Dr R A Jamieson of Shanghai has recently presented to the Museum of the Royal College of Surgeons a pair of feet, to which the following remarkable history is attached. Some months ago, a Chinese beggar excited much pity, and made a very profitable business in the streets of the foreign settlement, Shanghai, by showing the mutilated stumps of his legs, the feet belonging to them being tied together, and slung round his neck. Warned frequently by the police, he was knocked down by a carriage one day when scrambling out of the way of a constable. He was brought into hospital, under Dr Jamieson's care, being slightly injured; and, on recovery from his bruises, he sold to his medical attendant his feet, which otherwise would have been confiscated by the police. He admitted that, for the purpose of making himself as attractive as possible to the charitably disposed, he had, about a year previously, fastened cords round his ankles, drawing them as tight as he could bear them, and increasing the pressure every two or three days. In about a fortnight, the bones were bare, and he had no more pain. (*British Medical Journal*, 1882.)