due to dissection. . . . This suggestion cannot be refuted, but I think toxicity of the medium when given in excessive doses is the major factor in such accidents." With this we are in agreement. For that very reason, in the Bristol Royal Infirmary we have reduced the concentration of diodone from 70% to 50% (25-30 ml.) for the last 18 months. Though we do not get radiographs of such high contrast as we did with 70% diodone, they are of quite adequate contrast for diagnostic purposes. Assuming the same rate of injection, we are personally of the opinion that a contrast medium of high concentration should never be injected into the vascular system anywhere, if one of lower concentration will give diagnostic radiographs. This is quite definitely the case with translumbar aortography, especially in patients with obliterative arterial disease. When one or both femoral pulses are absent, it is imperative that diodone of not more than 50% concentration be used, because thrombosis of a narrowed iliac artery may take place when the opposite artery is already blocked. In addition, when the iliac arteries cannot drain off the contrast medium a massive dose may perfuse the kidneys or large intestine. In short, we would enter a plea that 50% diodone in similar quantities is quite adequate for translumbar aortography and that it is unnecessary to use 70% diodone to obtain radiographs of diagnostic quality in most cases. We are sure that the use of the lesser concentration would materially reduce the risk of complications.

Having regard to the potential dangers, it is doubtful if aortography should be employed except in disease of the aorta or great intra-abdominal arteries of such a nature that direct surgery is contemplated and will be made easier by the addition of radiographic delineation of the disease.—We are, etc.,

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Tonsils and Adenoids

SIR,—Dr. John Fry's excellent article (*Journal*, January 19, p. 124) led me to look into my bottom drawer and to extract the following notes.

In 1949 I joined a conference on tonsils and adenoids as the sole paediatrician. My otorhinolaryngological colleagues were all top-level consultants surveying the problem from within their own beautifully run departments. The great mass of these operations is in fact performed away from university centres. I collected information about the reasons for which 1,034 sets of tonsils and adenoids had been removed in a small London children's hospital and a paediatric unit in the Home Counties between September, 1946, and September, 1949. The peak ages for operation were 4, 5, and 6 years (664 cases). The indications taken from the case records were grouped under six headings. There were none on account of size and appearance only.

	Cases Per cent.	
(1) (Fry 2 and 5) Recurrent tonsillitis and for cervical adenitis, sore throats, and colds	592	57.3
(2) (Fry 3) Nasal disease including sinus disease	123	11.8
(3) (Fry 4) Aural disease	79	7.6
(4) (Fry 6) General medical diseases—e.g., rheumatic fever, asthma, acute nephritis	45	4.3
(5) (Fry 3) Ill-defined reasons—e.g., underweight, general ill-health	52	5.0
(6) No reason ascertainable from the records	143	13.8
	99.8	

Group (1) accounts for the largest number, but the size of the unknowns in group (6) is disconcerting. The aural cases (3) provide a surprisingly small number. In the smaller hospital only 9% of cases had been followed up, and of these there was definite improvement in only 68%. Whatever may have happened, the only information available to the surgeon was that six out of every hundred had improved and three had not. About the remaining 91 there was no comment. This group included two sisters, one operated upon for no clear reason, and her sister "be-

cause it would be nice to get them done together." In the children's hospital all cases were seen one month after operation, but very few subsequently.

In the hope of comparing the list of reasons for operation with that in the hospital group, we scrutinized a school waiting-list in a borough near London. Such lists contain many cases which never get treated, and therefore we expected, and found, a larger proportion of indefinite cases. The proportion was so high as to make worthless any comparison with the hospital operation series.

The records of 15,000 school and infant welfare clinic children out of a total of 16,000 covered by the service were examined. No account was taken of cases referred directly from the family doctor to a hospital outside the area. The waiting-list contained 795 names, including 84 cases for adenoidectomy only. There were still (1949) 110 cases put on the list in 1947, 327 put on in 1948, and 328 in 1949. The largest number was put on at 5 years, probably as the result of the first school examination (259 or 33.8%). In over 14% the reason stated was large tonsils, deep-set tonsils, unhealthy-looking tonsils, or blocked crypts, and these appearances were not correlated with a clinical history. Little care was taken to get such a history. The cases were all referred by the school doctor to an otorhinolaryngologist; he seldom turned down a case. For what they are worth the reasons for placing on the "T and A" list are set out:

	Cases Per cent.	
(1) Recurrent tonsillitis and/or cervical adenitis, sore throats, and colds	105	13.7
(2) Nasal disease including sinus disease	67	8.7
(3) Aural disease	17	2.2
(4) General medical disease	2	0.2
(5) Ill-defined reasons	23	3.0
(6) No reason given or no indication on case sheet	442	57.8
(7) Enlarged tonsils without symptoms	109	14.2

There seemed to be a real indication properly recorded in only 25% of cases.

There was a further "observation list" for children who were re-examined every six months and then transferred to the operation list or to "normal." This list numbered 446. Half of these were put on the list at the age of 5 years, and 206 for "enlarged tonsils without symptoms."

Dr. Fry comments, as we did in 1949, that too much regard is still paid to the appearance of the tonsil and too little to the history. The throat specialist did not always take a critical enough view of the case presented, possibly because in clinics he saw too many cases at a sitting. The parents were not always consulted about the history. There was scanty follow-up information to record the effect of the operation, a gap that Dr. Fry still finds. No treatment was carried out while the child's name remained on the waiting-list to try to improve conditions or prevent operation. We noted, like Dr. Fry, that no reassessment of the waiting-list case was attempted even after two or three years. We felt that too many parents and doctors look on tonsillectomy as an inevitable step in the child's life and take too light a view of the whole business. Dr. Fry points to extraordinary differences in the frequency of operation in different areas. It still seems necessary to stress that each child and not only the "T's and A's" should be most fully and carefully studied before operation is advised (or, indeed, refused) and reassessed during the waiting period. This is another way of saying that knowledge of the best laryngological practice still needs to be disseminated through the whole profession. I am greatly indebted to my friend and colleague Dr. Jill White (formerly Clarke), who carried out the real work of the inquiry.—I am, etc.,

London, W.1.

ALFRED WHITE FRANKLIN.

SIR,—Dr. John Fry, in his courageous and unsparing article on the removal of tonsils and adenoids (*Journal*, January 19, p. 124), makes no mention of the microscopic investigation of these structures. My experience in the last five years, which perhaps is shared by other pathologists, is