THE IDENTIFICATION OF TABLETS

BY

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It is an everyday occurrence for doctors to be faced with the question of identification of unknown tablets—in fact, large sums of money and much time are often expended in analysing tablets in cases of poisoning. Often when doctors are seeing patients of their colleagues, whose records are consequently not available, there is difficulty because they are not certain of the exact nature of the tablets which the patient is receiving. On occasion, also, a busy general practitioner may not be able to record fully the tablets prescribed, and in this situation he is in difficulty when wishing to re prescribe them. Patients sometimes bring in tablets to the doctor which they allege they have used for themselves on previous occasions and in which they have very great faith. They want to know if they can use them again, and it is obviously a great help to the doctor if he is sure of their composition. If, as often happens, the patient has a large quantity of tablets in stock, it is difficult to differentiate between the various types of tablets, particularly as the packets issued by chemists (to patients) are not usually labelled.

Sometimes patients are discharged from hospital with a large number of enigmatic boxes containing similar tablets; the doctor wishing to make an alteration in dosage of one of the drugs prescribed has difficulty in differentiating between the tablets, as, for example, tab. digoxin 0.25 mg. *B.P.*, tab. phenobarbitone $\frac{1}{2}$ gr. *B.P.*, and tab. ephedrin. $\frac{1}{2}$ gr. *B.P.* Consequently, in making a day-to-day alteration in treatment, the doctor, in order to be absolutely sure, may have to prescribe a completely new set of tablets with the amended dose—in which case it is obviously sensible for the boxes to be labelled.

If there was an infallible way of identifying tablets so that the doctor would know their nature but the patient would not, the above difficulties would be eliminated, and in some cases reduction in the prescription bill could be easily effected. It is for these reasons that I have felt prompted to make certain suggestions regarding the identification of tablets.

A method of identification by colour is not practicable for three reasons. Firstly, with the addition of colouring matter to tablets there is often a variation between batches, and if identification were to be done on a colour basis there would be no allowance for such variation. Secondly, with the number of tablets currently available there are not enough colours to go round. Thirdly, there is often a variation between the actual colour of the tablet and a printed colour plate. Hence it is clear that, to be infallible, means of identification must be based on die-stamping.

A large number of pharmaceutical firms mark their own tablets with the firm's name—for example, CIBA—or the initials of their firm in the form of a motif, I.C.I., M.S.D., S.K.F., etc., or a code name common to that firm's tablets—for example, "diskets" or "tabloid." As many tablets are white and of the same size, it is

often very difficult to tell them apart. For example, tablets of both "Iergine" and "lanoxin" (B.W. & Co.) have the identical "tabloid" mark, and even when placed side by side the difference between the two cannot easily be distinguished.

A System of Numbering Tablets

I do not view with disfavour the marking of any firm's products by the methods stated above, but I do suggest that there should be a means of easy identification by a system of numbers, which could be common to that firm's products and stamped on the tablets, together with the firm's trade mark or initials—for example, tab. lanoxin could have a die-marked figure in the centre of the tablet, and Iergine could have a different number, thereby facilitating the identification of such tablets from one another. I.C.I. have a system of empirical marking, which is an individual approach to the problem, but there are difficulties with this in that the marking cannot be easily described; for example, when phoning the chemist it is easier to say "I.C.I.8" than "I.C.I. on one side and on the other side a vertical dot and dash on one-half of the tablet and reversed on the other half," even supposing that the chemist has the identification chart for I.C.I. tablets available.

Some firms—for example, M. & B.—have been bold enough to mark the name of the product on the tablet. This is of course ideal so far as the doctor is concerned, but it tells the patient the name of the drug which he is receiving, whereas by the method envisaged the patient could merely know the name, initials, or trade mark of the firm, and only chemists and doctors would be able to identify the product from the firm's own numbers.

Another valid criticism against putting the name of the product on the tablet is that, if the product has a long name and the tablet is small, the consequent abbreviation could well be misleading. However, in the suggested system, if the tablet is small the initials of the firm (up to three letters) could be placed on one side and the number (up to three digits) on the other side; this would facilitate identification.

I am told that it will soon be possible effectively to mark sugar-coated tablets, and I believe it is also possible to mark other coated tablets. It is to be hoped that these tablets will in time be included within the scope of this scheme.

Capsules.—These can easily be marked with a system of different-coloured bands, somewhat akin to that employed in the electronic industry for the identification of resistors. I suggest that each firm manufacturing capsules could have a fixed coloured band for its exclusive use, while a combination of width, number, and colour of other bands could identify the different products, and, of course, strengths, for that firm. In support of this suggestion, here again it would not be easy for the patient to find out what was in the capsules, unless he had access to the proposed scheme of identification cards. Alternatively, it might be possible to print code letters and numbers on the same lines as for tablets.

B.P. Products

The question of *British Pharmacopoeia*, *British Pharmaceutical Codex*, and *British National Formulary* tablets must be considered. I feel that this scheme

should also include *B.P.* products, but that in view of the number of these involved it would probably be necessary to run several parallel series such as: *B.P.A.* 1-999, *B.P.B.* 1-999, *B.P.D.* 1-999, and so on up to *B.P.Z.*

With the majority of tablets it should be possible to get most of the letters and numbers on each side. Using the series indicated above, approximately 25,000 combinations would be available. This should easily cover the *B.P.* and allow plenty of additions to the *B.P.* list, and, of course, with the inevitable deletions there would be potential space for use in later years. There could be incorporated in the *B.P.* series a special *B.P.C.* series to cover the *Codex* tablets, or, alternatively, the *Codex* tablets could be included in the overall *B.P.* series. The latter suggestion would seem more practicable, as it might save a change of die with the compilation of a later *B.P.*

An alternative scheme for *B.P.* tablets would be to allocate code initials to all manufacturers of *B.P.* tablets, and these could be stamped on the tablets, followed by that firm's number for the tablet in each case. This would increase the number of markings, but it would facilitate (a) identification of tablet composition, and (b) the source of the tablet. If there were queries about the tablet's composition it would be much easier, therefore, to ascertain the source of manufacture than by the first method of *B.P.* series. A third suggestion is that simple numbers should be allocated for all *B.P.*, *B.P.C.*, and *B.N.F.* tablets, and that this number be stamped on one side of the tablet and the manufacturer's initials on the other. This would then obviate increasing the number of markings and at the same time have the two advantages outlined above.

As regards *British National Formulary* products, since this list of drugs often changes, it would not be practicable, though ideal, for there to be a *B.N.F.* series. As the contents of the *B.P.* change more slowly and as most of the *B.N.F.* tablets are in the *B.P.* (or *B.P.C.*) it would seem that these products could be included under the latter heading.

In conjunction with this, *B.P.* tablets are often made in two different colours by different firms—namely, stilboestrol in pink and white tablets—or in two or more different tablet styles. It is to be hoped that the style and general colour of each tablet will remain constant, whether it be a *B.P.* tablet or a pharmaceutical firm's product. If this is done it will save the patient going back to the doctor complaining that he has been given different tablets because he has got those tablets from a different chemist, who in turn gets his tablets from a different manufacturer. Should the doctor wish to prescribe a differently coloured tablet of the same drug, special tablets would have to be made.

The *Chemist and Druggist* (1956, 1958) has produced two kinds of tablet identification charts, which are of some use for tablet identification, but which inevitably do not approach completeness, even in proprietary products. However, I do think they cover the commonly prescribed pharmaceutical products. While a start has been made in this matter, I feel that things could be taken much further.

J. J. Hefferren (1959) identifies tablets on the basis of their physical characteristics. He outlines the results

of a study of 500 tablets, using this method. He says that results of the method should be confirmed by analysis. I suggest that this is ideal in theory, but that for busy general practitioners it is quite impracticable. In my scheme, analysis would be necessary only in exceptional circumstances.

It is to be hoped that, in the future, a doctor will be able to have a tablet reference book or card index. This, in my opinion, should be distributed to chemists by the Pharmaceutical Society (in conjunction with the British Pharmacopoeia Commission) and to doctors by the General Medical Council.

In this index all tablets manufactured would be illustrated if they were coloured, or described in detail if they were white, including the markings. This system should, of course, be kept up to date with addenda or new cards. Alternatively, firms could be responsible for the cards of their own products. At least two firms have such a card at present to cover their own tablets. I would suggest that the *B.P.* Commission and the Pharmaceutical Society should be made responsible for identification of *B.P.* and *B.P.C.* tablets.

It has been suggested that, if the code numbers and letters could be agreed for such a scheme, these letters could be written on the tablet packets by the retail chemist to assist in identification. I suggest that this would be an admirable temporary measure until all tablets were die-stamped with the code numbers, but not as a permanent measure.

This scheme, if agreed in principle by representatives of the medical profession, the pharmaceutical industry, British Standards Institution, etc., would obviously take a long time to be implemented, and at present it would be quite impossible to adopt it for all tablets. I would suggest, however, that the B.S.I. (or equivalent body) should be consulted in this connexion, particularly for new products and when firms are considering renewing their tablet dies. If this were done the B.S.I. could make appropriate recommendations. It is also to be hoped that, while 20 of the leading pharmaceutical firms of Britain are revising their literature (sent to doctors) so as to give a standard reference card for some or all of their products, they will also seriously consider adopting a new scheme of tablet identification on the lines indicated above. It would help doctors in cases of poisoning, or when in doubt of the nature of tablets in a patient's possession. Is it too much to hope that the medical profession, in association with the industry and Pharmaceutical Society, will consider this pressing matter? For with therapeutical advances the varieties of tablets will increase, and the consequent need for a reliable form of identification will be greater.

The Science Committee accepted this report unanimously on behalf of the Council of the B.M.A. It has also been approved by the Metropolitan Counties Branch Council, the General Medical Services Committee, and the Representative Body.

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REFERENCES

- Chem. and Drugg.*, 1956, p. 603.
— 1958, p. 698.
Hefferren, J. J. (1959). *J. Amer. med. Ass.*, 169, 479.