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Primary Care

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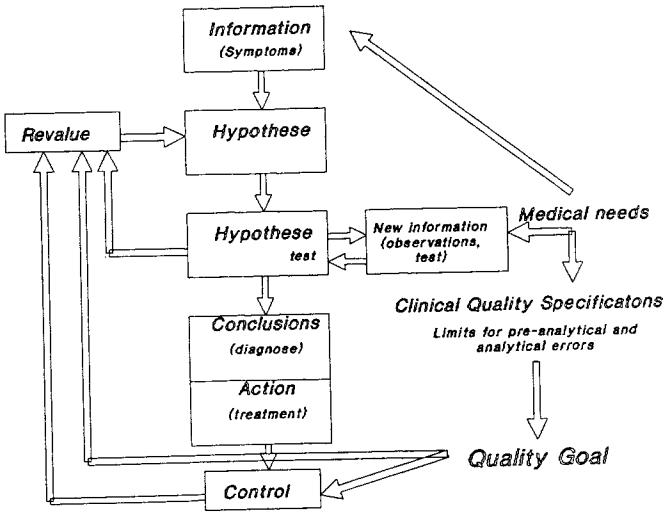
As an ordinary General Practitioner (G.P.) - what is our work? In 100.000 consultations 60% of the patients come to the doctor because of a symptom or a compla in of some kind, which makes discomfort for the patient. The rest 40% is covered of preventive investigations and schedule control of some kind of disease. In itself the symptom already makes a selection of our patients with reflections to sociodemographic relationsships as sex, age, family, education, work, religion and social class. Symptoms from functionally urgent organs as head, eyes/ears, heart and female organs have a lower symptom level for consultation at the G.P.



In about 80% of all consultations we can get a diagnose by the history from the patient. In 10% we need further clinical investigations and in the last 10% we get help from clinical chemical analysis and further investigations. From our own practice (five doctors) we have in a random month used clinical chemical analyses in 6.9% of the total amount of consultations. To this amount you have a further amount of analysis in our own clinic, which not have been counted: It is urine specimens (investigations by Stix, microscopy, culture (Uricult, Sensicult), B-Glucose and B-Haemoglobin.

The first thing, which in primary care not can be considered as a "standard error", is the preanalytical errors though we try to make it to a "standard error". The situation of the consultations often forces us to take specimens, where the preanalytical errors are not negligible - because of different staff, and the patient indeed is different. Some prefer to lay down under specimens collections, different degree of tourniquet, different exercises etc. The most troublesome is certainly S-Potassium where wrong decisions can be harmful to the patient. I mention this because of the great number of patients who are treated with diuretics and therefore have a need for supplementary potassium treatment.

With the diabetic patient we do not have the great problems because most insulin treated patients are controlled at the hospitals. Concerning the mature onset diabetes (NIDD), where most patients are controlled by the G.P. we do not make much use, of the Haemoglobin A_{1c} analyse. We could certainly use it more, also to look for fluctuations in the level of bloodsugar, and in control of the prescribed medications. Perhaps we could use it as a diagnostic test - as the only one - in the non-insuline demanding diabetes (NIDD).

In the thyreoid disorders there will be many situations where the analytical results will effect your treatment. When you have reached your diagnostic conclusions and are working in the control situation, you will alter your treatment e.g. in hypothyreodic situation if the result is 2.1 SD below the mean (T3,T4). That means that you will order the patient to take more thyreoid hormone in a situation where the results could be an analytical error? Mostly in this situation there will not be

inteference with other hormone treatments. The next control of the patient will then reveal that you have given too much hormone so you again have to alter the treatment, and so you can go on for years to keep working with the laboratory! If you instead were given the responsibility to the patient you can change the situation dramatically in the amount of control analysis. Telling the patient and pointing out the symptoms of hers/his past disease and with this in mind, let them be their own control! - and let the decision of control be up to the patient. This will give us a new dimension in our medical training.

In the other end of the thyreoid disease scale (hyperfunction) I am sure that this also could be worked out.

Concerning iron deficiency we will often make the first error before taking the specimen because the patient will not be fasting. Most are unaware of what G.P. will not know. Using a test with such errorcomponents would indicate that you very seldom have a need for S-Iron alone. Priory you will have taken the Haemoglobin, and the results of this analyse will guide you in which direction you have to search if there is a kind of anaemia. So your error of conclusion is a joint one, beeing both error in the estimation of Haemoglobin and the error of measuring S-Iron in the nonfasting patient.

In my opinon you should perhaps have Quality Goals in two ways:

1) Pointing out specifications of pre-analytical errors. If this specification not is respected you must subscribe the errors with reflection to the standard deviation of the test in that situation.
2) With respected pre-analytical error specificaton you may have the best test with the smallest standard deviation. That will give the possibilities for better diagnostic conclusion and treatment.

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