New and old pharmacological anticoagulant strategies.

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In the last decades we have seen the introduction in therapy of novel molecules in order to have better strategies in some pathological condition.

This kind of molecules was generally registered under NON INFERIORITY clinical trial versus the so call old molecules.

And in marketing process these new molecules was presented with better patient's logistics conditions versus the old: No lab monitoring necessity in all patients.

But according to registrative procedure this is not valid for some kinds of patients: obesity, renal failure in example.

This new molecules was presented able to reduce mortality rate due by intracranial bleeding towards old Strategies.

But if we see the economic cost of these new molecules we can see a great difference between the old and new costs.

We can see easily the patient population included in the registrative trial and the limitation to the prescription in the technical information document.

Can we easily say that real innovation is in this condition? Some old molecules showed already a good profile of actions and a tolerable (or not?) profile of toxicity.

These old drugs is today even now registered in therapy and not under recall by healthcare national authorities or sovra national org. so this can be used because a toxicity profile tolerable under specific condition.

Where is the limit to use the old less expensive molecule towards the new high expensive strategies?

We can see that some of this new therapeutic option have its, own antidotes, but the other of the same class no until today.

If there is the need on an antidote the new molecule presents a specific profile of toxicological aspect not to be under evaluated.

The same old and new drugs present different profile in activity and side effect but great differences in total costs.

Are we sure the new strategies are the real benefit to public healthcare system?

We can say that the clinical pharmaceutical care approach in medical team can be a useful in this field in order to better use Old and new pharmacological instruments [1-7] in order to rationalize the total costs.

According Loo et al. "In the UK, the rate of initiation of NOACs has increased substantially since 2009, and these agents have now surpassed VKAs as the anticoagulant of choice. Moreover, the characteristics of patients initiated on NOACs have changed over time, and this should be accounted for in future studies comparing NOACs and VKAs" [8].

And Sterne et al showed that "NOACs have advantages over warfarin in patients with AF, but we found no strong evidence that they should replace warfarin or LMWH in primary prevention, treatment or secondary prevention of VTE" [9].

Kumana et al writes that "For the primary outcome, the absolute benefits of NOACs were modest (NNT/year values being large). Reduced hemorrhagic stroke rates with NOACs could be due to superior embolic infarct prevention and fewer consequential hemorrhagic transformations. Among apixaban recipients, the absolute mortality benefit exceeded that for the primary outcome, indicating prevention of additional unrelated deaths. The substantially greater NOAC acquisition costs need viewing against probable greater safety and the avoidance of monitoring bleeding risks" [10].

We can say that a clinical pharmaceutical care approach can help the pharmacological choice in this kind of pathology in a multidisciplinary medical team.

The decision making system involved in this situation take high advantages by the clinical pharmacist competence in example we have seen in ICU MEDICAL TEAM [6].

"Clinical pharmacist can be a scientific edge between physicians and other professional and patient in therapy filed. PH care management can be useful instruments to have more rational therapy systems. Every drugs is registered for specifically indication, at the same time every drug to be a rational therapy need a rational decision making system that require a multidisciplinary team that can cover all aspect of pharmaceutical molecular metabolism kinetics and pharmacodynamics this create great possibility for clinical pharmacist but it must increase expertise in field of diagnostic (lab medicine and imaging) for the high relationship whit drug therapy" [11].

The clinical pharmacist is universally recognized as the expert for excellence in drugs use management according

Its pharmaceutical, pharmacological ,toxicological and pharmacoeconomy knowledge applied since to the single patient level (pharmaceutical care approach).

This expertize is more useful in condition of strictly need of cost/benefit/risk evaluation in drug use and monitoring[12,13].

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