Editorial

Pre hospitalization of the pediatric patient and guidelines pediatric anesthesia in our center. we do routinely

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Editorial

Just a few years ago it was believed that it was necessary to perform a number of blood tests and instrumental in anticipation of any type of major surgery or minor. This was dictated not only by the clinical needs but also by fears related to forensic responsibility, more so if the patient was a child. We can not say for certain that this habit has completely disappeared in all centers that deal with pediatric anesthesia and still are many fears and concerns encountered in everyday clinical practice. And 'well, then, to clear up any doubt and take stock of the situation.

Modern techniques of anesthesia and the use of safer drugs, along with the pronouncement of numerous national and international scientific societies, allow to say with absolute certainty that many blood chemistry and instrumental investigations are absolutely useless.[1] The Society of Anesthesiology and Intensive Care Neonatal and Pediatric Italian (SARNePI) said: "Outside of special cases related to individual specialties (neurosurgery, cardiac surgery and major surgery in general), the budget preanestesiologico usual, in patients over the age of 12 months, measures of election may not necessarily require the execution of blood tests and instrumental."

This statement, authoritative, is confirmed by the various study groups (Task Force)[2] of the American Society of Anesthesiologists (ASA) and the American Academy of Pediatrics. In Europe, thanks to FEAPA, the European Federation of Associations of Pediatric Anesthesia, many guidelines are consolidating to become an essential reference point to the clarification of many aspects of pediatric anesthesia.[3,4] A clinical examination should be performed only if this proves very useful to conduct anesthesia and surgery, or is able to better define the risk for the purpose of proper informed consent. Accurate preoperative medical history and physical examination, consult medical records related to previous hospitalizations and anesthesia, and so on.

Do not forget that the blood sample is a very important psychological event traumatic for the child. Often the technical difficulty of performing a withdrawal in a small patient troubled or afraid, leading to false positive or borderline that must be repeated with consequences on operating costs in addition to delays in implementation of operations in addition to not demonstrate organizational efficiency. An examination altered for the reasons mentioned above could represent a real boomerang in case of medico-legal litigation: how do you prove, in case of accident anesthetic, that there was no link?

It follows that you cannot ask for routine tests for all interventions but be careful selection based on certain criteria:

1. Avoid examinations in children older than 12 months for elective interventions and/or minor surgery.[5]
2. Perform a thorough history and physical examination: if they emerge from the need to perform in-depth clinical investigations in a targeted manner.
3. Major surgery, neurosurgery, heart surgery: always ask for the exams.
4. Ex premature: it is at risk of postoperative apnea. It is useful to request the hemoglobin concentration.[6]
5. Children under 6 months: ask hemoglobin concentration due to the known hematologic changes
6. Children suffering from anemia or diseases that affect directly or indirectly the blood counts: request a complete blood count.
7. Children with asthma or asthma-severe disease require the execution of a chest X-ray in the standard projections.
8. Screening emocoaugulativo: it is not always necessary as pediatric buoyancy coagulation abnormalities are rare.

In addition, a withdrawal is not done properly it can give false positives. It 'clear that in case of illness ascertained that involves coagulation (eg. Liver disease, deficiency of coagulation factors, use of anticoagulants), the examination is necessary.

Electrocardiogram

Congenital heart disease are present in 0.8% of live births, and many of them have evolved extremely positive with medical or surgical treatment. Murmurs innocent auscultate with some frequency but have never related to heart disease. A breath is not innocent in an asymptomatic child is evident in aortic stenosis or hypertrophic cardiomyopathy. In most cases, therefore, it is not necessary that an electrocardiogram.

In conclusion we can summarize that the issues to be considered to address the right choice are:[5,7,8]

I. Age group.

II. Proper history taking.

III. Accurate preoperative visit.

Type of Surgery

a. Choosing the type of anesthesia (locoregional, general, sedation)

b. Evaluation of local health and provenance (eg. Endemic diseases)

c. Reference to national guidelines and international

d. Background and experience of the anesthetist.

The last point is of no small importance. The child and anesthesia arouse many fears and uncertainties. Hence the need for minimal training for people who are new to this discipline as well as the super-FEAPA recently published by the European Federation of Associations of Pediatric Anesthesia, who felt their regulatory guidelines with this and many other aspects of this particular discipline.[8] Pediatric surgery and pediatric anesthesia today traveling together, for this reason, in our regional referral center, with the approval of the Scientific Committee, we have developed a common path between the Unit of Pediatric and Neonatal Surgery and the combined operations of Pediatric Anesthesia and Resuscitation Unit of the General Hospital Our Lady of Consolation of Reggio Calabria, for the first access of the pediatric patient in the hospital. According to the guidelines of national and international in young patients who face for the first time a surgery in a pediatric ward, we are used to perform a series of pre hospitalization routine tests that are also the first contact for the young patient with the world of health and all its nuances, that have becomed a routinely standarized protocols.

In our itinerary, contemplating that for most of the young patients is the first time they run a blood sample or a cardiology with performing electrocardiograms, we made a "journey" that is completed in less than 45-50 minutes. We perform complete blood count, formula, typing, coagulation factors, blood chemistry, electrolytes and enzymes, an ECG and pre anesthetic visit in the same morning, and we have a complete picture of the health of the young patient, under which very often is not known even to pediatrician or family. We realized in this past decade of territorial service with easy access hospital, made as much as possible "a-traumatic", the pediatrician, the family itself has come to their knowledge of particular pathologies of young patients who may be were discovered with age or with access hospital wards not dedicated. Celiac disease, congenital hypothyroidism or transient, childhood diabetes or juvenile and coagulation disorders (Factor VII-VIII - Von Willembrandt) were the most important and communes.

By this method we have adopted so far made a simple demographic and health service to the people and to our region, in the format and the related international protocols related to it. The active collaboration between the different units and services today allow us to bidding is a useful, simple and laminated connection between the different specialties and especially pediatricians clinical territory.

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Conflicts of interest

Authors declare that there is no conflicts of interest.

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