

Editorial

Orthopaedic service of the Hellenic Police: crime, wounds and overuse injuries

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The Armed Forces Health Service in Greece is a special and autonomous health institution, distinct from the rest of the national health systems, with the mission of providing complete and uninterrupted health coverage to military personnel and their families. At the same time, it covers part of the needs of the Security Forces' personnel.

On the other hand, the health agency of the Security Forces is insured by EOPYY and the health department of the Security Forces has a role of health and administrative support. However, there is a differentiation in the health support of the Fire and Coast Guard, where they have been integrated into the two major military hospitals, those of the Air Force (251 Hellenic Air Force General Hospital) and the Navy (Athens Naval Hospital) respectively, and into that of the Hellenic Police, which has remained autonomous, providing primary health care, while tertiary coverage is also provided through military hospitals. This means that the Hellenic Police Health Service has its own structure and headquarters, while the active beneficiaries of the corps carry out the procedures for checking, sick, leave or fitness, in the Corps' structures. Despite the fact that the health care provider for the security forces is insured by EOPYY, meaning they can be treated in any public structure, a large number of patients are treated by the military hospitals of the three branches of the armed forces by choice for reasons of familiarity with the Corps, thus increasing their burden.

Police personnel serving in the field are the spearhead of public safety, exposed daily to multiple and often unpredictable risks. It is often called upon to face situations in peacetime that are similar to those in wartime. The nature of their mission requires constant presence in operational fields, contact with citizens, criminal elements, as well as immediate intervention in high-risk incidents, such as clashes, arrests, traffic accidents, social tensions or natural disasters. Every service on the road involves unpredictable situations that can quickly turn dangerous, making preparedness, composure and training vital factors for the protection of both police officers and citizens.

As a result, Orthopaedic injuries are the main reason for personnel to attend for medical assessment and treatment at the primary and tertiary healthcare clinics of the Armed Forces and the Hellenic Police. Also, they account for a significant percentage of all patients attending regular outpatient clinics. Indicatively, in 2024, approximately 13,000 patients were examined at the Athens Central Clinic of the Hellenic Police alone.

The combat personnel of the Hellenic Police are called upon to meet particularly high physical and mental demands, which far exceed the levels of a normal professional activity. The nature of their mission to maintain security, operational readiness and action under pressure require constant physical training, endurance and action, and therefore



Figure 1. Operating to compact delinquency is carried out within the limits of driving safety.

the involvement of police personnel in some kind of sporting activity or use of gyms, especially among younger people, is almost the norm. Repetitive strain due to exercise requirements, combined with the need for prolonged activity at work, increases the risk of injuries or chronic Orthopaedic conditions. This is seen in the regular outpatient clinics of the service with injuries that are usually ligamentous or strain.

All combat services involve frequent exposure to adverse environments, intense physical exertion with participation in exercises or operations that involve mechanical strain on the body. However, the working conditions per service personnel create different hazardous situations and different frequencies of damage.

Most common Orthopaedic injuries by police unit

Services such as motor bike cyclists who are constantly on the move, such as the DI.AS team (motorcycle police unit) the Z-team, etc. are called upon daily to operate in dense traffic conditions within urban areas with particularly high demands. The nature of their mission, apart from simple patrol, is immediate intervention, pursuit, which sometimes requires high speeds and sharp maneuvers, increasing the likelihood of traffic accidents and injuries,



Figure 2. Training police cyclists is difficult and demanding.

which are particularly frequent. At the same time, they are exposed to various other forms of violence, especially during periods of unrest or on dangerous missions. The injuries that orthopedic surgeons in these groups are called upon to treat vary from simple physical injuries, abrasions, contusions, to severe fractures. Indicative of the frequency of injuries in these teams is that in the first three years of operation of the DI.AS team, almost three times the number of this team had come for sick leave due to injuries of varying severity (Figure 1, 2, and 3).

The services for restoring order and suppressing crime), formerly known as MAT (Riot Police Unit) are on the front line of managing mass gatherings, demonstrations and incidents and are facing high levels of risk every day. The conditions they encounter are often unpredictable and can quickly turn violent with the risk of injury from thrown objects, molotov cocktails, physical attacks and body blows (Figures 4 and 5). It is not uncommon for the community to witness similar scenes through the



Figure 3. Police officers on bicycles often become victims of criminals.

media. The common injuries that occur constantly are burns, direct impact injuries with neurological damage or fractures (Figure 6).

The special repressive anti-terrorist unit (Special Anti-terrorist Unit, EKAM) of the Hellenic Police is one of the most combative and elite units, the operation of which is directly linked to high-risk situations. Its mission is to deal with extreme situations of violence and danger such as terrorist acts, hostage situations, dealing with heavily armed criminals (Figure 7). The injuries they are often subjected to do not relate exclusively to their field of operation but to their daily hard training and practice, which is extremely demanding. Common reasons for visiting Orthopaedic clinics are stress injuries or injuries of varying severity. A characteristic of this group is the invocation of health problems in cases of advanced strain and the relatively shorter recovering time in returning to activities compared to the rest of the police personnel.

The crime prevention and suppression teams of the Hellenic Police (Special Operation Units, OPIKE) are special teams that operate in areas with increased crime and delinquency. They have spe-



Figures 4 and 5. Molotov cocktails attack on police officers during social unrest.

cial training and carry heavy weapons to deal with criminal acts such as robberies, drug trafficking and dealing with heavily armed criminals (Figure 8). At the same time, to maintain fitness, daily exercise is required. It is clear that the exposure to injuries is high and therefore the Orthopaedic department is called upon to deal with injuries that vary from moderate to severe.

Patrol car drivers or helicopter pilots are a group of officers whose long hours of sitting and frequent vibrations often cause problems in the lower back or neck. At the same time, the movement of patrol cars under conditions of increased traffic, especially in cases that require pursuit, increases the risk of traf-



Figure 6. A policeman down with multiple injuries (cranio cerebral injuries and hand fractures).



Figure 7. The special repressive anti-terrorist unit of the police have hard and arduous training.

fic accidents and injury (Figure 9). Spinal injuries and back injuries are frequent reasons for visits to orthopaedic clinics.

On foot patrol services for crime control are some of those where police officers often come to Orthopaedic doctors for conditions of varying severity after fights or arrest procedures. An example of these injuries is fractures, wounds from sharp or cutting instruments (e.g. knives), injuries from direct impact, burns, severe ligament injuries, are the most common cases treated in these groups (Figures 10 and 11).

Police officers serving in offices usually visit the orthopaedic department for common pathological Orthopaedic problems. However, because each police officer is on duty 24 hours a day, in emergency



Figure 8. The crime prevention and suppression teams of the Hellenic police often have to face heavily armed criminals.



Figure 9. Pursuits increase the risk of traffic accidents.

cases, personnel serving in offices assist in operations to take measures during marches or demonstrations with the possibility of injuries, as mentioned above.

It is worth noting that firearm injuries are reported more frequently in the police forces than in the armed forces, which underscores the heavy operational burden of employees. Weapons are part of the police officer's equipment, which he carries daily and potentially in use, and not just for training



Figure 10. During handcuffing and escape attempt of the detainee, police officers suffered injuries to their fingers.

purposes. Injuries from direct shots or ostracism, or self-injury, are not common, but neither are they negligible in number. They constitute special damages since they are often permanent. Given that the police officer carries weapons and has the duty of controlling crime and delinquency in general, it often leads to armed conflicts, resulting in the police recording a significant number of deaths in the line of duty.

A major issue that arises after injuries is the time required to return to work. A significant percentage of orthopaedic patients require sick leave, with a duration ranging from a few days to several months, depending on the severity of the injury. These absences affect both operational readiness and the smooth operation of services. A characteristic of the police force is that full recovery from injuries or musculoskeletal injuries often requires more time than in the general population, as reintegration into service requires excellent functionality and high physical performance, in order for the previous patient to be considered fully capable of any operational disposition. For example, the repair of a fracture or ligament damage that in the general population requires relatively satisfactory functionality for the patient to be considered fit, In the armed forces, the recovery time is longer until full functional recovery



Figure 11. Multiple knife wounds to a policeman from criminals during foot patrol.

so that they can return to being capable of the specific demands of their service from the first hour of work. Also, an injury to a finger that causes some degree of stiffness might not affect anyone's job, at least to a large extent. However, an employee in an armed force may even change his service status, so that he is forced to go into a non-combatant state since the use of his weapons is affected.

At the same time, in some cases, there is a delay of return to active duty due to the patients' invocation of persistent, minor complaints, either out of fear of recurrence or due to psychological factors due to the injury or after other previous serious injuries. This fact creates additional difficulties in personnel management and burdens the operation of the units, as the time of absence from duty is extended. The need for a balance between actual rehabilitation and objective assessment of the ability to return becomes more difficult and critical for maintaining the operational readiness and effectiveness of the Corps, with the Orthopaedic department as the decision-making center.

In addition to cases that require a long rehabilitation period until patients fully recover, there are also those in which particularly serious Orthopaedic conditions cause permanent physical damage or disabilities that significantly limit the functionality and professional ability of the staff. In many cases, sufferers become unable to perform combat duties or even participate in activities that require physical effort, resulting in them being transferred to office duties or even being removed from active duty. This

reduces operational capability and the availability of experienced personnel, which affects the cohesion, training and effectiveness of the units.

Indicative of the volume of patients and recovery time is the number of Orthopaedic cases examined by the health committees. Over 2,500 patients are examined annually in order to receive sick leave. About 30 per year are deemed unfit for active duty and are either discharged or transferred to office duty.

Another issue that Orthopaedic surgeons are called upon to address is that of overprescribing. Due to the frequent major injuries to which personnel are subject to, a complete imaging or laboratory examination is required in each case. In order to support the clinical, medical, legal or service reasons (objectivity of opinions). This creates an additional problem for Orthopaedic surgeons, especially considering that each examines 3,000-6,000 patients annually.

The implications in these cases vary. Lost work hours due to sick leave from Orthopaedic conditions have multiple and significant effects on the body. First, operational readiness and staff availability are immediately reduced, which increases the workload of the remaining staff and may burden the fiscal situation with the need for overtime or additional hiring and travel. Long-term or recurring orthopaedic injuries lead to readjustment of service roles, early retirements or long-term disability, resulting in compensation and therapeutic rehabilitation costs. The consequences extend to crisis management and citizen safety, while the role of the health service becomes essential for maintaining the functionality and long-term smooth operation of the departments.

More generally, in the Hellenic Police, where operational capability requires personnel who are physically and mentally fit, Orthopaedic conditions take on particular importance. The effects of orthopaedic conditions differ significantly between combat and office services in terms of type and severity. In combat units, where high physical

endurance, mobility and immediate response are required, absences due to injuries are more frequent, more severe and have a direct impact on operational readiness, team cohesion and mission safety. In contrast, in office services, the impacts are mainly organizational and productive, without affecting operational capacity as much, but the need for ergonomic prevention and management of chronic diseases increases.

Conclusion

It is clear that prevention is a factor in which the police should invest in order to limit the physical harm of the police. In addition to the logistical infrastructure and proper training, specialized knowledge of first aid among the personnel would be necessary. The creation of a Trauma Center is being implemented in the Hellenic Police, which is an important initiative to strengthen protection and personnel.

The Center will operate as a specialized training institution, providing police officers with modern knowledge and practical skills to prevent injuries that may occur after injuries sustained during the performance of their duties.

In the primary and tertiary health care clinics of the armed forces and police forces, Orthopaedic injuries are the main reason of attendance for assessment and treatment. They constitute a significant challenge for uniformed healthcare personnel who are called upon to address them based on a variety of factors other than purely medical ones. The large volume of Orthopaedic patients requires personnel, structures and resources to be able to cover these conditions. While the vast majority are successfully treated with conservative or surgical methods, the annual number of cases with permanent disability necessitates targeted interventions in the areas of prevention, early diagnosis and comprehensive rehabilitation, in order to maintain the functionality and operational readiness of the personnel. Especially for orthopaedic departments, they are critical factors in ensuring the sustainability and operational readiness of the Armed Forces.