Sensitive areas of the human body

Knock out and controlling tactics for police and law enforcement officers

INTRODUCTION

Manipulating specific areas or different systems of the human body can give you maximum control over a violent aggressor. This kind of manipulation works on all different kinds of individuals -- including Emotionally Disturbed People (EDP) and those under the influence of drugs.
The reason it is effective is it relies partly on mechanical manipulation of the body's own structure rather than just applying excessive – but random –force.

Against specific, easy to locate and hit areas of human body, different kinds of manipulation with your open hands force physical reaction by the aggressor's body -- including hyper-extension of muscles/tendons, enormous shock/ disorientation and/or knock outs with a minimum of visible physical damage.

At the same time, risk for officers own injury is minimized.

This kind of manipulation is nothing mystical or magical. Nor does it only belong to obscure Chinese kung fu systems, that require 20 years of training for you to be effective.

They are easily learned and, just as easily, applied on duty.

It is easy to manipulate and effect different systems of human body. But it is almost impossible to fully utilize the results of this manipulation without understanding its basics, which is to say the physical body and its reactions to force.

Due to space limitations we can give you only a very brief introduction on how different systems are built and their basic functions.

Therefore the information will be concentrated on basic and effective manipulation of:

1. Skeleton and muscles
2. Central and Peripheral Nervous System
3. Circulatory and Respiratory/Breathing systems

MANIPULATION OF MUSCLES AND SKELETON

Physical confrontation on the streets is a series of continuous, dynamic, brutal and unpredictable movements. Fortunately, manipulating the skeleton and muscular system is the most basic, quickly learned and easiest to use in stressful confrontations.

This isn't necessarily how you could affect the function of specific muscle, but rather understanding basic reactions of your body to violent physical contact. And these reactions are based in how the human body is put together.

Each physical contact between people involved in such a confrontation will result in a visible and violent change of body position and very often in damage/injury.

As used here, Physical Reaction means: the first, visible response to a hard physical contact.
The key point is observable reaction to a blow. It is NOT what you want to happen, but what really does happen when you hit someone in a certain way.

Understanding these reactions is very important for making your tactics more effective. It is your knowledge of these kinds of reactions, that give you the ability to consciously force the aggressor into a desired position.
Hitting in this manner is like a game of pool. Like the pool balls, where the aggressor goes is determined by where and how you hit.

Not only does properly targeted physical contact cause a significant change of body position, but at the same time, it forces instinctive body reactions **(IBR**). This is how the body physically responds to damage. It is both unconscious and automatic. And it too can be manipulated by you to your *advantage*. Your punch or kick forces this reaction.

How big or violent the reaction depends on:

1. The surprise of the movement (unexpectedness)
2. The force of physical contact
3) Placement of your force

It is important to realize, the physical reaction depends on the intensity of the stimulation/physical contact.
But this is NOT, as many might assume a matter of pure strength on your part, but also knowing where and how to hit .

One correctly placed explosive blow will have better results than three random powerful blows.
Whereas one powerful, well-placed blow can and will drop all but the most committed aggressors.

WHIPLASH

Almost every kind of intense physical contact causes an enormous overstretching (hyper-extension) of neck muscles and tendons -- so called whiplash.
Beside pure muscular reaction this whipping action may cause skeletal injuries and also shock to the nervous system (causing enormous disorientation).This exactly the same reaction/injury which happens when involved in car accident.

However, when a less extreme degree is applied, whiplash becomes a powerful tool for an officer.
The body of an aggressor becomes extremely unstable and easy to manipulate when you have induced a small whiplash. In this condition it is nearly physically impossible for him to resist, making it easy for you to put down and control him.

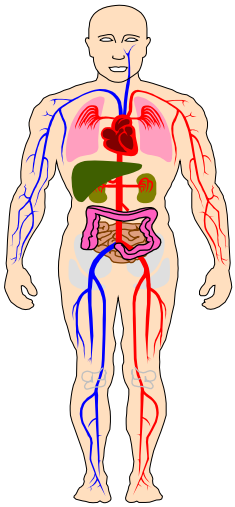
Below are some simple examples of physical reaction caused by violent contact to different areas of human body.

Of course, those single actions may be put together in a different multiple hits or moves combinations. They can be used both in self defence and/or during offensive tactics.

This kind of mechanical manipulation is also an important factor of affecting the Central Nervous System and other systems of human body.

CIRCULATORY AND RESPIRATORY SYSTEMS

The basic function of the circulatory & respiratory systems is transportation of blood and oxygen to different areas of the body. And one of the most important areas that oxygenated blood must reach is the brain.

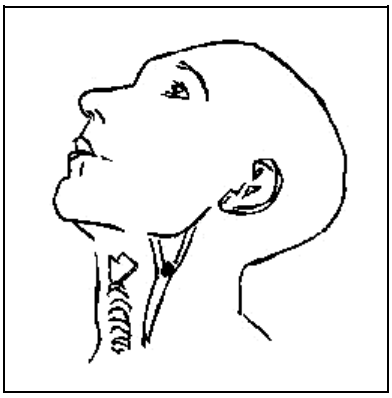


Some of the simplest examples of manipulating the circulatory/respiratory systems are the different kind of chokes founded in judo.

While long-term disruption of this process can and will cause brain damage and/or death, short term disruption can be useful for officers. Under perfect circumstances, this kind of disruption will render you unconscious after just 4-5 seconds.

However there are other, quicker ways to effect these systems

At the level of trachea, the carotid artery splits up in 2 parts. One path going inside of the cranium, transporting blood and oxygen to the brain. The other one transports blood and oxygen to the facial muscles. At the point of this split, located inside the artery, is a receptor that regulates the blood pressure in the body. There is one on each side of the neck.



Powerful blows, or extended pressure, to those receptors will make the blood pressure to fall rapidly, resulting in a “knock out”.

The same result of ‘suddenly lowering blood pressure’ may occur if you put your seat belt on wrongly across your neck. Under these circumstances, a sudden powerful stop or car accident will snap the belt, causing a knock out.

Of course any kind of hits/strikes to the neck area during violent and very stressful street confrontation may also cause physical damage to trachea.
So care must be taken and training under a certified instructor is mandatory

Another way to manipulate this system is by simultaneously closing/blocking the arteries on both sides of the neck. These are the so called "sleepers holds” or judo chokeholds that many officers are familiar with.

In theory 4-5 seconds would be enough to take you out (unconscious). But during violent and dynamic confrontation when both fighters are moving it around 10 seconds is not uncommon.

In "sleeper holds" you are blocking the artery at one side with your biceps and with your forearm at the other side ***preventing the flow of blood to the brain. Although pressure is also being applied to the blood pressure regulators, which lessens the change of blood being forced through the constricted artery.***

Manipulating the circulatory and respiratory systems is usually done as the last part of confrontation. It is usually done as a take down and/or as controlling method. Usually you have to first make a some kind of distraction (i.e. few hits or kicks to very sensitive body parts, verbal distraction etc.) before you will be able to close the distance and control the aggressor in this manner.

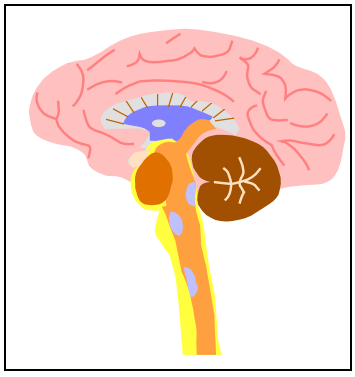
Remember that all presented methods are very effective, but be very careful during your training as to powerful hit may cause irreparable damage.

As stated earlier these techniques should only be practiced under the supervision of a certified instructor. Also manipulation of the circulatory system should not be attempted without basic first aid and CPR training.

NERVOUS SYSTEM

The human nervous system can be divided in 3 basic parts:

1. Central Nervous System (CNS) - Brain and spinal cord
2. Peripheral Nervous System (PNS) - All the nerves leading from the spine (for example nerves in the arms and legs.
3. Autonomus Nervous System



Without going to deep in the functions of nervous system we can say that basically one of its main function is sending, receiving and translating impulses between CNS, ANS and PNS.

It is essentially a giant communication network .The idea is to disrupt those communications.

For our kind of research human nervous system can be affected / manipulated in 2 basic ways:

1. manipulating specific nerves PNS -
which can result in temporary paralysis of specific body parts or, at the very least, interfere with their effective operation.
2. manipulating CNS -
basically this is overloading the system, resulting in neurological shutdown. Too many
signals in too short of a time will shock the brain, causing a direct knock out.

What follows are the location and basic ways of manipulating specific nerves / PNS /:

- **Nerve femoralis / Inside the thigh /**

Location: Inside of the thigh. About a hand length above the knee.
Manipulation & results: Hit with the bony part of the body or kick with your knee/shoe will give you a physical reaction and will also paralyze the leg

- **Nerve isciadicus / outside of the thigh /**

Location: Outside of the leg. Easiest to get a hand length above the knee.
Manipulation & results: Hit with bony part of the body or best with your knee / very good method in close distance / or shoe will give both physical reaction and will paralyze the leg.

- **Below the ear**

Location: Just below the ear.
Manipulation & results: Pressing at spots just below the ears will cause enormous pain. Almost impossible to handle.
It is possible that if the pain is strong enough and sustain for a 5-10 seconds the person will faint.
Press in and up direction at both sides at the same time

Remember that the result of any manipulation depends partly on how intense and accurately the contact was made. Usually officers and/or other law abiding citizens don't want to hit or cause the pain to other citizens -- criminals included . They hesitate and don't strike hard enough. Unfortunately, this gives poor results.

Another critical factor is how adrenalized or intoxicated the aggressor is. Mental state and chemically induced changes to his nervous system can have a major effect on how fast these tactics work -- and even if they work at all.

Of course perfect results will be achieved only during perfect conditions. However during a very dynamic, violent confrontation everything is changing very fast and to hit one very small specific nerve/spot with one perfect hit is **almost impossible** -- especially when you fighting for your life Therefore more safe and realistic approach will be for you to hit very fast with a few powerful blows until you gain some kind of effect.

Manipulating the PNS requires finer motor skills. Skills which will disappear during stressful situations. To make this kind of manipulation you will need perfect, almost clinical conditions without the moment of stress.

So the more realistic and effective option will be manipulating with Central Nervous System.

MANIPULATING WITH CNS

The human nervous system is a large network of small nerves and very simple manipulation will cause a neurological overreaction and/or shutdown

In a sense, manipulating the CNS is easier as you don't need so much precision. Unlike manipulating with specific nerves, no fine motor skills are required. *However, you must compensate for this lack of precision with power. You must hit harder to create sufficient shock.*

This kind of manipulation is done best with open hand slaps. Believe it or not, the open hand has a few advantages over the fist. Besides minimizing your own hand injuries the open hand is usually bigger than a closed fist or one finger. Which means the bigger area of aggressors body will receive the impact and pain signals. A larger area and more nerve endings will receive, register and send more signals to the brain.

Too many signals in too short time will cause a overreaction resulting in neurological shutdown of the CNS. With repeated hard impacts you will cause enormous shock, disorientation, physical collapse and possible knock out.

As stated, with this kind of manipulation you don't have to be precise. It is enough that you come close to the target area. But of course the main rule is the closer to the brain the better.
However we have to mention that a series of violent, powerful slaps to an aggressor's back may result in a knock out.

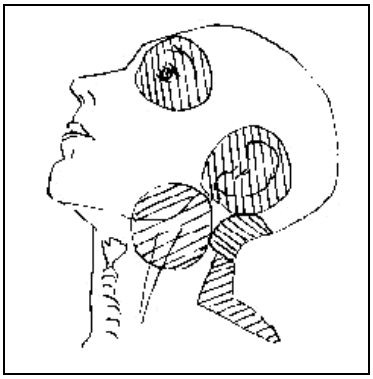
In theory, under perfect conditions, you will get the maximum results (knock out) with just one slap. But, as with specific nerves, during violent confrontations you will be safer doing several powerful slaps to different areas of the aggressor's body.

SENSITIVE AREAS OF CNS

- **Around the eye**

Powerful slap to the area around the eye. Cover the whole area with your hand. It is usually easier if done with the inside of your hand (palm).

Results: Enormous shock and disorientation or occasionally, a pure knock out. If a knock out occurs, he will drop straight down to the ground.
Physical reaction by taking a few steps backwards, covering the eye with both hands, body bends slightly backwards turning away from the hit and forward bend.



Around the ear

Powerful slap to the area around the ear. Cover the whole area with the inside of your hand.

Results: Disorientation, enormous shock and often knock out.

High risk of eardrum rupture.

Physical reaction by covering the ear. Turning away from the strike, forward bend and a few steps away from the attacker. If knock out will fall sideways to the ground.

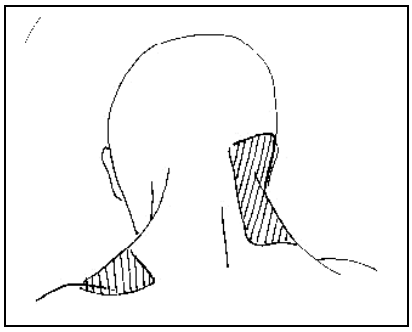
- **Side of the face**

Location and manipulation: below the ear close to the chin . Powerful open handed blow to the area of a "regular " slap can result in knock out.

Result: If the aggressor's mouth is not shut, high risk of broken jaw. Slap upwards is very dangerous.

Physical reaction: Turns attacker's head, disorientation, redirection. If knock out occurs the attacker will just drop down or spin around before falling

- **Back of the head**



Location and manipulation: from the base of the skull upwards.

Results: Powerful slap to the back of the head will cause enormous disorientation and/or direct knock out.

Physical reaction will force the attacker to bend forward, attempt to grab the struck area and take a few steps forward. Possibility of this to turn into a forward fall with arms reaching out, attempting to catch himself.

*** Neck / Shoulders**

Results: Very good as a offensive take down. Powerful simultaneous slaps backwards/ downwards to both sides of the neck/shoulders will result in enormous pain and disorientation.

Physical reaction: whiplash, falling down and backwards to the ground. While on the ground will start to think what happened?.
Possible knock out.

*** Back**

Result: A series of powerful slaps to the back / kidney or shoulder and neck area can easily cause a knock out. Enormous pain and disorientation. Even the toughest aggressor will want to cry.

Physical reaction: bending forward and taking a few very fast steps away from the pain. Shoulders pulled back, head up.

Of course in a self defence situation do no try to choose that as your main target.

- **Forearms**

Results: A few very powerful slaps to the forearms will cause enormous pain and shock, forcing the attacker to pull his arms toward the body and turning away from the pain. More intensive pain if the hits are to the inside of the forearm.

Physical reaction: attacker's body turns to the outside. The more you hit the more he turns.

VISIBLE DAMAGE

Although the reasons why are beyond the scope of this article, this kind of open handed manipulation minimizes the risk of the aggressor showing visible physical damage.

Of course visible damage may still happen as you are involved in violent confrontation with unpredictable changes.

And of course more serious risk for visible injury is when the attacker makes contact with hard surfaces (such as floor, cars, tables, etc.) while falling down.

Summing up nervous system manipulation

One of the best examples of what happens when the nervous system receive powerful signals of enormous pain is when a player is kicked in the shin during footboll / soccer game.

1. Physical contact forces a violent change of body position/ physical reactions.

Very often the player will collapse to the ground in enormous pain. He bends the kicked leg, bringing his knee up to the chest grabbing with both hands to the kicked area. This first instinctive reaction will usually take 5-10 seconds depending on the power of the blow.

Of course in 5-10 seconds you could spit him to death.

2. After a while the injured player comes up and start to chase the attacker.

The explanation of his reactions is that his nervous signals sent to the brain were so powerful they caused enormous chock to the system/ partial shutdown . After a while the brain translated the signals and found the solution to the problem. Sending back: "You are OK. No serious damage. Stand up and catch the bastard!!!".

You as an officer don't allow him to reach step two. By the time his nervous system comes back on line, he is down on the ground handcuffed.

Factors that increase the effectiveness of manipulation

A few simple details will make the manipulation more effective also to the very beginner:

- **explosive action**

You defensive tactics must explode out. The motion must be as quick in beginning as it is in delivering the force.

***Muscle tension**

The more relaxed the execution of your movement the better results. They will be both explosive and effective.
Easy to say a bit more difficult to achieve in a violent situation.

- **Attitude**

You have to have a positive/offensive attitude. You WILL SURVIVE at whatever price!!! You will nail his ass!!! This kind of attitude force explosive/explosive movements.

- **Open hands**

To gain the maximum results and minimize both your own and the aggressor's visible injuries you have to use relaxed and open hand slaps.

Also fighters are used to get hit with closed fists. Open hand hits are different and will shock the nervous system in different, unexpected and more scary ways.

- **Peripheral Vision**

Try to detect his slightest physical movement or indication that he is about to attack. Briefly: The earlier, the more powerful and more surprisingly you hit him the better your results.
Once again it is easy to mention it in a classroom but usually when you are scared / stressed you will be forced in to tunnel vision.

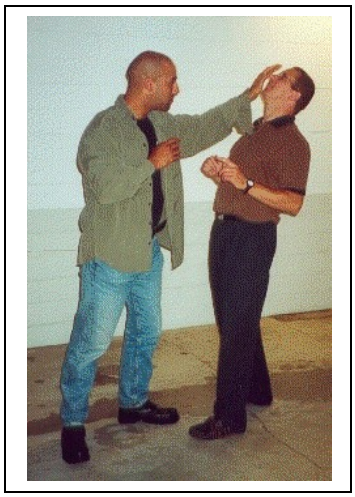
Applying manipulation during violent confrontation

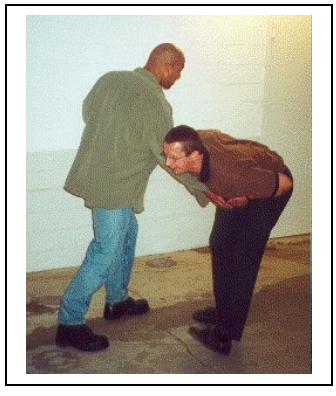
Stress during violent confrontation will greatly decrease your ability to fight/move. Your finer motor skills will disappear and tunnel vision will come in to play narrowing your vision field. During such circumstances choosing specific, very small spots/nerves will be impossible.

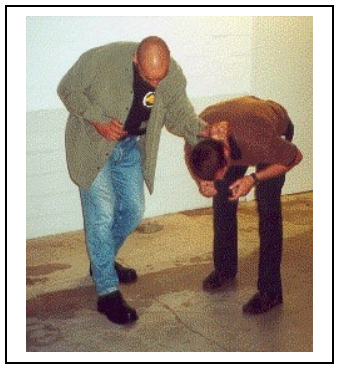
Only your gross motor skills will be functioning. Don't try to defend yourself by waiting for a chance to use specific techniques or trying to choose and hit specific spots.
What will happen will happen.

In a real situation you should concentrate on hits to body areas not protected by clothes -- or minimally covered. Basically face, head, neck, groin. Which areas should/will be struck by you depends on the first violent contact and reaction to it.

Basic strategy of your actions is: you hit -> attacker reacts -> you choose either the same or a new target and hit -> attacker reacts etc... and so on.







In short, you hit him until he reacts the way you want him to. By either falling down or stopping attacking and in attempting to turn away, he exposes himself to your take down.

CONCLUSION

Learning how to manipulate and affect the different systems of human body is not difficult. In learning this, you greatly increase your fighting/self defence/arresting tactics skills.
This basic information presented in this chapter is enough to save you life. Of course you would need some kind of instruction and training to find out how much power is enough to control different situations and make it even more effective. But for pure survival this is all you need.
This is a very serious and very devastating skill you will gain. So be careful during your training but use it to save you or others life if necessary.